

Before the
FEDERAL COMMUNICATIONS COMMISSION
Washington, DC 20554

In the Matter of)	
)	
Wireline Competition Bureau Seeks Comment)	WC Docket No. 10-188
on Business Broadband Marketplace)	

COMMENTS OF QWEST COMMUNICATIONS INTERNATIONAL INC.

Qwest Communications International Inc. (Qwest) hereby submits these comments on the Public Notice of the Wireline Competition Bureau seeking comment on the current status and availability of broadband services in the business broadband marketplace.¹

INTRODUCTION

The Public Notice generally seeks information on the needs and uses of broadband services and technologies in the various business markets, identified (properly) as “small and medium businesses and enterprise users, including mobile carriers.” As such, the focus turns more on broadband from a customer perspective, rather than from a strictly technological or provider perspective. This is a propitious approach, as the business market,² especially the enterprise market, is highly customer driven based on customer needs and preferences, not simply specific products that a given provider may be marketing at any given time. A business customer is seeking ways to communicate and solutions to particular needs and desires, rather than looking to purchase a particular product from a particular provider. In this context, it is

¹ Wireline Competition Bureau Seeks Comments on Business Broadband Marketplace, Public Notice, WC Docket No. 10-188, DA 10-1743, rel. Sept. 15, 2010.

² These Comments do not attempt to understand the task of defining the relevant product markets with precision. *See In the Matter of Petition of Qwest Communications International Inc. for Forbearance from Enforcement of the Commission’s Dominant Carrier Rules As They Apply After Section 272 Sunsets*, 22 FCC Rcd 5207, 5222 ¶ 24 (2007).

generally inaccurate to say that a provider possesses market power in the use or deployment of a particular product or technology (for example, DS1 service) without examining how customers perceive such technologies fitting into their overall communications plans and needs.

While this is most apparent in dealing with larger business customers (both wholesale and retail), it is also important to retain this customer focus in dealing with the communications needs of customers with smaller operations, including those within the small business group. For example, within what Qwest considers to be the small business group, most customers' broadband needs can be readily met by cable modem or DSL service. However, even here it is unwise to generalize too broadly, as a small customer may have communications needs that are quite sophisticated.

In this vein, Qwest sees the instant information request as a positive step in providing the Commission a structure that enables it to better evaluate the ability of market forces to ensure that telecommunications provider prices are reasonable. Qwest is on the record as postulating that, in the area of private line/special access services, its prices are already subject to market pressures that ensure the proper economic result and that further price regulation of these services (when provided by an ILEC) is neither warranted nor in the public interest. The information gathered in response to the instant public notice, and presumably in follow-up submissions, should further document this conclusion.

Qwest provides the following additional thoughts on the specific questions raised in the Public Notice.

1. What transmission services, technologies, or types of facilities are used in the business broadband marketplace, including those discussed in this Notice and any others that are relevant to a full understanding of the marketplace? What is the overall size of the business broadband marketplace today, in terms of revenues, demand, or other criteria?

Qwest has reviewed the “transmission” services and technologies that characterize its own broadband offerings, and has compiled its major broadband offerings that fit this description in Attachment A hereto. These services provide a wide range of transmission functions that are of significant utility to large business and wholesale customers. However, many of the services are useful to and used by smaller business customers as well. As part of this chart, Qwest lists the major competitors that it encounters in marketing each individual service. It must be noted that most of these services do not compete strictly against other services that are technologically or functionally the same. To the contrary, customers, especially large enterprise and wholesale customers, are largely seeking solutions to individualized telecommunications and information needs, not specific products or vendors.

Moreover, it is becoming more and more inaccurate to try to separate transmission and content when dealing with broadband services. As is apparent from the services described in Attachment A, many of these services combine transmission and information, or at least information processing. This is precisely the issue faced by the Commission in its recent *Notice of Inquiry* concerning broadband classification and regulation³ -- the fact that traditional notions of common carriage, based as they are on separation of content and transmission, are no longer completely valid in today’s market.

In addition, Qwest has a number of broadband offerings tailored to the small and medium business markets. These have been described in Qwest’s comments and reply comments on Cbeyond’s Petition for Expedited Rulemaking to Require Unbundling of Hybrid, FTTH and

³ *In the Matter of Framework for Broadband Internet Service*, Notice of Inquiry, GN Docket No. 10-127, 25 FCC Rcd 7866 (2010).

FTTC Loops.⁴ Qwest attaches these comments and reply comments hereto as Attachments B and C.

2. Of the various possible combinations of services, technologies, and facilities, how prevalent are particular combinations in this marketplace today, in terms of revenues, demand, or other criteria? What explains this variation? For example, do variations arise from differences among customer types; differences in service features, bandwidth, or other technical characteristics; differences in price, or other factors?

Qwest's experience as a provider of these services is that customers, especially larger customers (enterprise and wholesale markets) are more interested in price, service level assurances, latency and overall performance and guaranties, and are less sensitive as to the underlying technologies that support their telecommunications needs. Customers are also increasingly interested in obtaining the appropriate web interface (often referred to as a "portal"). As the question implies, larger customers are more and more frequently combining services purchased individually. Examples of where Qwest has seen its own services recently combined by customers include:

- Layer 2 Metro Optical Ethernet combined with Multi-protocol Label Switching (MPLS).
- IP services combined with various services and protocol that enhance security (in Qwest's case, often MPLS).
- VoIP and other data-based services.
- Hosting (centralized applications in the "IP cloud") and standard IP services.
- DS1s and DS3s combined with other technologies, such as SONET.

Small and medium-sized businesses tend to purchase finished/packaged IP services (as opposed to larger businesses, which tend to rely more on purchasing dedicated components with which to

⁴ See Attachment B, Comments of Qwest Communications International Inc., Jan. 22, 2010, WC Docket No. 09-223 at 7-15; Attachment C, Reply Comments of Qwest Communications International Inc., Feb. 22, 2010, WC Docket No. 09-223 at 7-11.

construct their own IP networks). Small and medium-sized businesses also often rely on cable modem and/or DSL services for their basic broadband connections, and deal with Information Services Providers on that basis.

3. What are the trends in the business broadband marketplace with respect to each of the categories or criteria identified in response to the prior questions?
 - A. Which combinations of services, technologies, and facilities are increasing or declining in prevalence or importance, and why? For example, are certain combinations more appropriate, available, or affordable for certain types of providers (*e.g.*, mobile)?

Qwest's experience is that those combinations are increasing that offer customers more ubiquity, more scalability, lower cost, performance that matches application performance needs, and real-time application services. In addition, there is a growing demand for peer-to-peer communications as opposed to dedicated point to point connections. Combinations that are increasingly seen as providing these types of functionality to customers include:

- DS1s and DS3s with SONET.
- Layer 2 Metro Optical Ethernet with MPLS.
- IP with security features.
- VoIP combined with other data and IP services.
- Next generation call centers (conferencing applications).
- Hosting applications and IP services.

Combinations that are becoming less popular include:

- Analog private line and special access services.
- Frame relay and ATM.
- Traditional TDM broadband services.

All of these are declining because of the increasing popularity of Ethernet and IP services.

- B. What are the trends in pricing and technical characteristics for particular services, technologies, and facilities?

The technological trends of the broadband services denoted above look towards increasing customer control, signified by increased scalability of bandwidth, low latency, additional value added services and bundles (CPE, transport and web interfaces). Portal (web interface) accessibility for performance, network diagrams, service ordering and management are increasingly important aspects of newer technological deployments, especially for large business and wholesale customers.

- C. What is the likely impact of non-traditional marketplace participants and technologies, such as cable companies and wireless platforms?

Cable companies and wireless carriers are competing for business in the small, medium and enterprise markets. Cable companies in particular have achieved a major (and at times dominant) position in the small business market with broadband services based on cable modem technology. In addition, in many markets cable providers are expanding high-capacity broadband service (to a large extent Ethernet) to medium and enterprise business customers. These “non-traditional” providers, along with existing carrier competitors, are continuing to put pressure on all market participants with regard to price and product/service innovation -- especially in the area of value added services (information service and processing on top of transmission).

- D. What is the effect of the growth of new non-carrier wholesale customers, e.g., consumer electronics companies seeking to embed broadband in devices such as e-books or tablets, energy companies seeking to offer retail smart grid products, and so forth? Are the needs of these customers being adequately met?

These “non-carrier wholesale customers” generally need increased infrastructure bandwidth capabilities on existing services, and generally are interested in higher bandwidth

services. Technology is continuing to develop to fill these needs. However, meeting their needs is often challenging from an investment perspective due to long payback periods, which often suppress investment in a highly competitive market.

Respectfully submitted,

QWEST COMMUNICATIONS
INTERNATIONAL INC.

By: /s/ Robert B. McKenna
Craig J. Brown
Robert B. McKenna
Suite 950
607 14th Street, N.W.
Washington, DC 20005
(303) 383-6650
Craig.Brown@qwest.com
Robert.McKenna@qwest.com

Its Attorneys

October 15, 2010

ATTACHMENT A

ATTACHMENT A

- What transmission services, technologies, or types of facilities are used in the business broadband marketplace, including those discussed in this Notice and any others that are relevant to a full understanding of the marketplace? What is the overall size of the business broadband marketplace today, in terms of revenues, demand, or other criteria?

Service	Brief Description	Types of Customers that Purchase Service	Typical Providers of the Service
CPE	Any hardware or software residing at the customer location that is connected to any network service or helps run any application. Examples include: Routers, Ethernet Switches, Phone Systems, Firewalls, Data storage units.	All different sizes of business customers – small business, large business, enterprise.	Direct from CPE Suppliers including: Cisco, Juniper, Adtran, Avaya. Resold or packaged as part of a service via the Service Providers, CLEC's, VAR's, and SI's such as : AT&T, Verizon and Verizon Business, Level 3, XO, Integra, Covad, PAETEC (McLeod), Windstream, Vonage, Skype, Cox, Comcast, NewEdge Networks, Teligent, ELL, Fibernet, RCN, tw telecom, Reliant, Allegience, Global Crossing, Sprint.
Voice	From Local voice services to international capabilities connectivity to the Voice over IP and the public switched telephone network. A full suite of traditional local and long distance products as well as a robust offering of Voice over IP (VoIP) products is available.	All different sizes of business customers – small business, large business, enterprise.	Service Providers, CLEC's, VAR's, SI's. AT&T, Verizon and Verizon Business, Level 3, XO, Integra, CBeyond, Covad, PAETEC (McLeod), Windstream, Cox, Comcast, NewEdge Networks, Teligent, ELL, Fibernet, RCN, tw telecom, Reliant, Allegience, Global Crossing, Sprint.
QMOE	Ethernet connectivity that supports point-to-point and multipoint virtual connections connecting customer locations within a metro area. Offers customers a wide	All different sizes of business customers – small business, large business,	Service Providers, CLEC's, VAR's, SI's.

ATTACHMENT A

	range of choices to meet their needs from simple connectivity to multipoint aggregation functions with SLAs that support the highest level of performance for efficient, secure operation.	enterprise.	AT&T, Verizon and Verizon Business, Level 3, XO, Integra, CBeyond, Covad, PAETEC (McLeod), Windstream, Vonage, Skype, Cox, Comcast, NewEdge Networks, Teligent, ELI, Fibernet, RCN, tw telecom, Reliant, Allegience, Global Crossing, Sprint.
QWave	A dedicated, point to point, Dense Wave Division Multiplexing (DWDM) service, that utilizes the Reconfigurable Optical Add Drop Multiplexer ROADM technology. The service is circuit based with two types of configurations and offers multiple interfaces/protocols from SONET, Ethernet to Storage Area Networks (SAN). Typical customer applications include data center and corporate campus connectivity across a metro or across the nation.	Large business, enterprise.	Service Providers, CLEC's, VAR's, SI's. AT&T, Verizon and Verizon Business, Level 3, XO, Integra, CBeyond, Covad, PAETEC (McLeod), Windstream, Vonage, Skype, Cox, Comcast, NewEdge Networks, Teligent, ELI, Fibernet, RCN, tw telecom, Reliant, Allegience, Global Crossing, Sprint.
International Private Line	A dedicated, point-to-point service for customers who need a dedicated connection between two customer locations, with one or both locations situated outside of the United States. International Private Line Service supports various services, including delivery of voice, video or data traffic. This service offers high degree of security and auto restorability through SONET or SDH protection. The service is competitively priced and is end to end fully managed.	Large business, enterprise.	Service Providers, CLEC's, VAR's, SI's. AT&T, Verizon and Verizon Business, Level 3, XO, Integra, CBeyond, Covad, PAETEC (McLeod), Windstream, Vonage, Skype, Cox, Comcast, NewEdge Networks, Teligent, ELI, Fibernet, RCN, tw telecom, Reliant, Allegience, Global Crossing, Sprint.

ATTACHMENT A

iQ Networking – Delta Port	Basic, IP WAN connectivity for price sensitive customers needing reasonable bandwidth options with little to no added bells and whistles or service guarantees. Delta port combines HSI lines, Cisco CPE, and VPN configuration to enable a customer to connect their locations via a broadband DSL based model. The Delta Port can be used to connect branch/remote locations to an iQ Private Port enabled HQ for a seamless and cost effective overall solution.	All different sizes of business customers – small business, large business, enterprise.	Service Providers, CLEC's, VAR's, SI's. AT&T, Verizon and Verizon Business, Level 3, XO, Integra, CBeyond, Covad, PAETEC (McLeod), Windstream, Vonage, Skype, Cox, Comcast, NewEdge Networks, Teligent, ELL, Fibernet, RCN, tw telecom, Reliant, Allegience, Global Crossing, Sprint.
iQ Networking – Public Port	High performance IP WAN solution for multi-location business that require business class connectivity, reliability and security. Reach includes domestic United States and international markets. This service is foundational for businesses pursuing an IP based infrastructure in order to support current and future IP business connectivity and applications needs. WAN solution scaling from T1 to 10G bandwidths. Support for static/BGP routing. Highly scalable architecture with End 2 End SLA's for Jitter, Latency and Packet Loss.	All different sizes of business customers – small business, large business, enterprise.	Service Providers, CLEC's, VAR's, SI's. AT&T, Verizon and Verizon Business, Level 3, XO, Integra, CBeyond, Covad, PAETEC (McLeod), Windstream, Vonage, Skype, Cox, Comcast, NewEdge Networks, Teligent, ELL, Fibernet, RCN, tw telecom, Reliant, Allegience, Global Crossing, Sprint.
iQ Networking – Private/Enhanced Port	High performance IP WAN solution for multi-location business that require business class connectivity, reliability and security. Reach includes domestic United States and international markets. This service is foundational for businesses pursuing an IP based infrastructure in order to support current and future IP business connectivity and applications needs. MPLS or VPLS WAN solution scaling from T1 to 10G bandwidths. Support for static/BGP routing. Multi-cast and 4 queue QoS. Highly scalable architecture with End 2 End SLA's for Jitter, Latency and Packet Loss.	All different sizes of business customers – small business, large business, enterprise.	Service Providers, CLEC's, VAR's, SI's. AT&T, Verizon and Verizon Business, Level 3, XO, Integra, CBeyond, Covad, PAETEC (McLeod), Windstream, Vonage, Skype, Cox, Comcast, NewEdge Networks, Teligent, ELL, Fibernet, RCN, tw telecom, Reliant, Allegience, Global Crossing, Sprint.
iQ Networking –	High performance IP WAN solution for multi-location	All different sizes of	Service Providers, CLEC's, VAR's,

ATTACHMENT A

International	business that require business class connectivity, reliability and security. International markets are serviced via dedicated POP's, VPOP's, and/or IP partners. Arrangements are also in place for FOTS support for international customer locations. This service is well suited for customers with the majority of their sites including HQ in the domestic United States with need for support of some sites in international locations. MPLS WAN solution scaling from T1 to 10G bandwidths. Support for static/BGP routing. Specific international SLA's for Jitter, Latency and Packet Loss.	business customers – small business, large business, enterprise.	SI's. AT&T, Verizon and Verizon Business, Level 3, XO, Integra, CBeyond, Covad, PAETEC (McLeod), Windstream, Vonage, Skype, Cox, Comcast, NewEdge Networks, Teligent, ELLI, Fibernet, RCN, tw telecom, Reliant, Allegience, Global Crossing, Sprint.
Managed Services	Qwest Network Management Services (NMS) is a router/switch management service. Qwest configures, manages, and provides health reporting/metrics on the customer's devices. NMS is backed by IBM's ERMIS organization with the breadth and scale to manage a wide variety of devices from the top equipment vendors. Devices in domestic United States as well as international locations can be supported. Qwest/IBM will support static as well as BGP configurations. Qwest Managed Security Service (MSS) is an all encompassing premise based security solution that provides sought after Unified Threat Management features such as Firewall, VPN, malware protection, and content filtering. Qwest deploys the UTM device, configures, manages, and provides health and threat reporting/metrics as part of the solution. MSS is backed by Qwest's alliance with IBM ISS. This premised based solution includes deploying a Juniper SSG UTM device (SSG20, SSG140, SSG520). The device is sized based on customer traffic/network requirements and configured in accordance with the tier of service the customer selects.	Small and medium business customers.	Service Providers, CLEC's, VAR's, SI's. Technology providers that have a managed services suite. AT&T, Verizon and Verizon Business, Level 3, XO, Integra, CBeyond, Covad, PAETEC (McLeod), Windstream, Vonage, Skype, Cox, Comcast, NewEdge Networks, Teligent, ELLI, Fibernet, RCN, tw telecom, Reliant, Allegience, Global Crossing, Sprint.
Security	Includes a range of premise based and network based	All different sizes of	Service Providers, CLEC's, VAR's,

ATTACHMENT A

Solutions	<p>solutions. Customers can choose from these solutions to secure their infrastructure and business processes.</p> <ul style="list-style-type: none"> • Endpoint and Premise: can be implemented to protect endpoint devices and create a secure perimeter defense at the customer's site. • Network: a suite of security services that are managed and configured in the network as opposed to via premise based device configurations. These solutions often have the advantage of centralized management and the ability to prevent incidents from entering the customer's perimeter/local network. 	business customers – small business, large business, enterprise.	<p>SI's.</p> <p>AT&T, Verizon and Verizon Business, Level 3, XO, Integra, CBeyond, Covad, PAETEC (McLeod), Windstream, Vonage, Skype, Cox, Comcast, NewEdge Networks, Teligent, ELI, Fibernet, RCN, tw telecom, Reliant, Allegience, Global Crossing, Sprint.</p>
Collocation Services	<p>Consists of space, power and bandwidth. Bandwidth includes periodic hardware check (ping) with e-mail notification of any unresponsive device, which may indicate problems in connectivity, power and/or device availability. Collocation hosting service is available in cages or half- and full-rack configurations. Charges are based on a per-rack/cage basis.</p>	All different sizes of business customers – small business, large business, enterprise.	<p>Service Providers, CLEC's, VAR's, SI's.</p> <p>AT&T, Verizon and Verizon Business, Level 3, XO, Integra, CBeyond, Covad, PAETEC (McLeod), Windstream, Vonage, Skype, Cox, Comcast, NewEdge Networks, Teligent, ELI, Fibernet, RCN, tw telecom, Reliant, Allegience, Global Crossing, Sprint.</p>

ATTACHMENT A

Managed Hosting Services	Combine technical account management, senior-level technicians and certified processes to provide customer-centric, 24/7 managed hosting services in the customer's data center or in a Qwest facility.	All different sizes of business customers – small business, large business, enterprise.	Service Providers, CLEC's, VAR's, SI's. AT&T, Verizon and Verizon Business, Level 3, XO, Integra, CBeyond, Covad, PAETEC (McLeod), Windstream, Vonage, Skype, Cox, Comcast, NewEdge Networks, Teligent, ELI, Fibernet, RCN, tw telecom, Reliant, Allegience, Global Crossing, Sprint.
Storage and Backup Services	Provide customers with a suite of fully-managed, leading-edge products and services, including Qwest Storage Service-Storage Area Network (SAN)	All different sizes of business customers – small business, large business, enterprise.	Service Providers, CLEC's, VAR's, SI's. AT&T, Verizon and Verizon Business, Level 3, XO, Integra, CBeyond, Covad, PAETEC (McLeod), Windstream, Vonage, Skype, Cox, Comcast, NewEdge Networks, Teligent, ELI, Fibernet, RCN, tw telecom, Reliant, Allegience, Global Crossing, Sprint.

ATTACHMENT B

Before the
FEDERAL COMMUNICATIONS COMMISSION
Washington, DC 20554

In the Matter of:

Cbeyond, Inc. Petition for Expedited
Rulemaking to Require Unbundling of
Hybrid, FTTH, and FTTC Loops
Network Elements Pursuant to 47
U.S.C. §251(c)(3) of the Act

)
)
)
)
)
)

WC Docket No. 09-223

COMMENTS OF QWEST COMMUNICATIONS INTERNATIONAL INC.

Craig J. Brown
Harisha J. Bastiampillai
Suite 950
607 14th Street, N.W.
Washington, DC 20005
(303) 383-6671
Craig.Brown@qwest.com
Harisha.Bastiampillai@qwest.com

Attorneys for

QWEST COMMUNICATIONS
INTERNATIONAL INC.

January 22, 2010

TABLE OF CONTENTS

	Page
I. INTRODUCTION AND SUMMARY	1
II. THE COMMISSION'S RULES REGARDING FIBER AND HYBRID LOOPS HAVE PROMOTED COMPETITION AND INVESTMENT	3
A. The Commission's Rules are in Accord with the Letter and Spirit of the Telecommunications Act of 1996.	3
B. The Commission's Predictive Judgment Has Been Borne Out.....	7
C. There Has Been Substantial ILEC Fiber Investment in the Post-Triennial Review Order Years.	15
D. Re-imposing Unbundling Requirements for Fiber and Hybrid Loops Would Discourage Future Investment, Reducing Consumer Welfare.....	22
E. CLECs are Not Impaired Without Access to Unbundled Fiber and Hybrid Loops.	25
F. The Costs of Providing the Access Beyond Seeks Far Outweigh the Benefits.....	30
III. CONCLUSION	32

Before the
FEDERAL COMMUNICATIONS COMMISSION
Washington, DC 20554

In the Matter of:)	
)	
Cbeyond, Inc. Petition for Expedited)	WC Docket No. 09-223
Rulemaking to Require Unbundling of)	
Hybrid, FTTH, and FTTC Loops)	
Network Elements Pursuant to 47)	
U.S.C. §251(c)(3) of the Act)	

COMMENTS OF QWEST COMMUNICATIONS INTERNATIONAL INC.

I. INTRODUCTION AND SUMMARY

Qwest Communications International Inc. (Qwest) submits these comments in accord with the Federal Communications Commission's (Commission) *Public Notice* in the above-referenced docket.¹

Cbeyond characterizes the Commission's "deregulation" of fiber and hybrid loops as an unsuccessful "experiment" -- an experiment that should be ended. However, Cbeyond supports its advocacy with the flimsiest of "evidence." First, the deregulation (*i.e.*, the finding of non-impairment for fiber and hybrid loops) was by no means an "experiment" -- the Commission conducted its impairment analysis under the prescriptions set forth in the Telecommunications Act of 1996 and as interpreted by the Supreme Court and the U.S. Court of Appeals for the D.C. Circuit. Second, the "experiment" was not a failure; in fact, under any reasonable standard, it would have to be viewed as a significant success and one of the most integral measures in fueling the deployment of broadband in the last five years. This "experiment" has spurred significant capital investment in fiber facilities, as described below. The very fact that this investment has occurred despite challenging economic and market conditions indicates that this

¹ *Public Notice*, WC Docket No. 09-223, "Pleading Cycle Established for Comments on Petition for Expedited Rulemaking Filed by Cbeyond, Inc.", DA 09-2591 (Dec. 14, 2009).

deregulation has been a substantial spur to the increased deployment of broadband and advanced networks. And this investment coupled with increased broadband competition in all markets, including the small business market, has provided a wealth of product and service options for end users.

With any petition seeking reevaluation of existing Commission rules, particularly those promulgated a mere six years ago, the petitioner must demonstrate some changed circumstances that would warrant such a change. Otherwise, the Petition is merely an untimely petition for reconsideration.² Cbeyond claims that there has been “changed circumstances” but in essence their claim is that the changed circumstances have been a lack of change. Specifically, Cbeyond argues that the Commission’s major premise in not applying unbundling obligations to hybrid and fiber loops, *i.e.*, that such unbundling would serve as a disincentive to ILEC investment, appears to have been false.³ While this premise has no basis, Cbeyond nonetheless contends that the market it serves -- the market for businesses with 250 or fewer employees (which it refers to as the small business market) -- has been negatively impacted by this alleged lack of investment. According to Cbeyond, this has led to a network that is unable to meet small business service needs.

Cbeyond proposes that the Commission require ILECs to “provide unbundled access to the packetized bandwidth of hybrid loops, FTTH loops, and FTTC loops at retail rates”⁴ and that “incumbents offer a high bandwidth connection, between 6 and 10 Mbps, serving small businesses over fiber and hybrid loops at the lowest retail price offered by the incumbent LEC in

² 47 C.F.R. § 1.106(f).

³ Cbeyond Petition at 11.

⁴ *Id.* at 5.

the relevant MSA.”⁵ First, as described further below, there is no basis for the Commission to turn back the clock and require unbundling of fiber and hybrid loops under Section 251(c). Second, there is no basis for the Commission to set a price for these elements at what Cbeyond refers to as the “lowest retail rate.” While this would not be a rate equal to TELRIC, there is no question that, as described below, the rate will not compensate LECs for the significant cost of providing such access to CLECs, not to mention the fact that the rate would not reflect the costs of changes to the network architecture model that would be needed to provide unbundled access to the fiber facilities. Cbeyond’s proposed rate regulation of access to fiber and hybrid loops in and of itself is unwarranted and would discourage investment in broadband networks and advance services. Third, as discussed below, there is no basis to require ILECs to offer such a *new* “packetized bandwidth” service, which would impose significant implementation costs on ILECs.

As Qwest shall demonstrate, Cbeyond has provided this Commission with no justification to devote resources to embark on a reevaluation of these rules. The Commission’s rules, which have already been found to be in accord with the goals of the 1996 Act, have spurred broadband competition and investment which is exactly what the Commission predicted would occur.

II. THE COMMISSION’S RULES REGARDING FIBER AND HYBRID LOOPS HAVE PROMOTED COMPETITION AND INVESTMENT

A. The Commission’s Rules are in Accord with the Letter and Spirit of the Telecommunications Act of 1996.

The Commission rendered its decision to refrain from attaching unbundling obligations to ILECs’ next generation fiber networks in order to promote ILEC investment and to provide

⁵ *Id.* at 21.

incentives for CLECs to differentiate their product offerings by deploying their own facilities.⁶

In making this determination, the Commission was applying the type of “nuanced” analysis

mandated by both the Supreme Court and D.C. Circuit.⁷ Cbeyond’s Petition asks the

Commission to do the very thing that the D.C. Circuit admonished it not to do in *USTA*.

Cbeyond’s Petition focuses on a discrete segment of the broadband market and ignores the

overall competitive context of the market and ILECs’ place in that market. As the D.C. Circuit

observed, the Commission’s Advanced Services reports confirmed “both the robust competition,

and the dominance of cable, in the broadband market.”⁸ The court noted that the Commission

had found that “Competitive LECs and cable companies appear to be leading the incumbent

LECs in their deployment of advanced services.”⁹

⁶ *In the Matter of Review of the Section 251 Unbundling Obligations of Incumbent Local Exchange Carriers, Implementation of the Local Competition Provisions of the Telecommunications Act of 1996, Deployment of Wireline Services Offering Advanced Telecommunications Capability*, Report and Order and Order on Remand and Further Notice of Proposed Rulemaking, 18 FCC Rcd 16978, 17141-42 ¶ 272 (2003) (*Triennial Review Order*), corrected by Triennial Review Order Errata, 18 FCC Rcd 19020 (2003); on remand, 20 FCC Rcd 2533 (2005). The Commission determined:

First, with the certainty that their fiber optic and packet-based networks will remain free of unbundling requirements, incumbent LECs will have the opportunity to expand their deployment of these networks, enter new lines of business, and reap the rewards of delivering broadband services to the mass market. Thus, we conclude that relieving incumbent LECs from unbundling requirements for these networks will promote investment in, and deployment of, next-generation networks. Second, with the knowledge that incumbent LEC next-generation networks will not be available on an unbundled basis, competitive LECs will need to continue to seek innovative network access options to serve end users and to fully compete against incumbent LECs in the mass market. The end result is that consumers will benefit from this race to build next generation networks and the increased competition in the delivery of broadband services.

⁷ *AT&T v. Iowa Utilities Board*, 525 U.S. 366, 389-390 (1999); *United States Telecom Ass’n v. FCC*, 290 F.3d 415, 425-426 (D.C. Cir. 2002) (*USTA*).

⁸ *USTA*, 290 F.3d at 428-429.

⁹ *Id.*, quoting *Local Competition Order*, 15 FCC Rcd at 3835 ¶ 307.

The Commission was directed to look at the entire competitive context and not one particular technology. The court found nothing that provides a “license to the Commission to inflict on the economy the sort of costs noted by Justice Breyer under conditions where it had no reason to think doing so would bring on a significant enhancement of competition.”¹⁰ Cbeyond does not provide any indication that the “robust competition” in broadband in the mass market has in any sense diminished, or that cable has lost its competitive lead. And, with the cable industry’s penetration into the small business market, any onerous unbundling requirements imposed on ILEC fiber facilities will only exacerbate the competitive divide between cable companies and ILECs in the broadband market.

For some facilities, there is likely to be some type of cost disparity because the cost for a newer entrant will be higher than that of the incumbent. For instance, to duplicate a loop in an ILEC’s existing network may be more expensive for a CLEC than an ILEC. But to deploy a new loop, particularly a fiber loop that can support multiple services such as voice, data and video, does not create the cost disparity that duplication of an ILEC legacy loop may create, nor would such deployment be wasteful.¹¹ The Commission is tasked with applying a standard of impairment that does not mandate forced sharing in the face of every cost disparity.¹²

¹⁰ *Id.* at 429.

¹¹ *See, id.* at 427. As the D.C. Circuit observed:

Each unbundling of an element imposes costs of its own, spreading the disincentive to invest in innovation and creating complex issues of managing shared facilities. *See Iowa Utilities Board*, 525 U.S. at 428-29 (Breyer, J., concurring in part and dissenting in part). At the same time -- the plus that the Commission focuses on single-mindedly -- a broad mandate can facilitate competition by eliminating the need for separate construction of facilities where such construction would be wasteful. 525 U.S. at 416-17. Justice Breyer concluded that fulfillment of the Act’s purposes therefore called for “balance” between these competing concerns. *Id.* at 429-30. A cost disparity approach that links “impairment” to universal characteristics, rather than ones linked (in some

The Commission determined that “the substantial revenue opportunities posed by FTTH deployment help ameliorate many of the entry barriers presented by the costs and scale economies.”¹³ Thus, the CLEC is in relatively the same position as the ILEC when it comes to deploying such loops, particularly in greenfield situations. In fact, at the time of the *Triennial Review Order*, CLECs were far ahead of the ILECs in FTTH deployment having deployed more than two-thirds of the existing FTTH loops.¹⁴ Unbundling, however, would have provided CLECs little incentive to invest, and would have dampened the ILEC incentive to invest. In the words of the D.C. Circuit in *USTA*, “[i]f parties who have not shared the risks are able to come in as equal partners on the successes, and avoid payment for the losers, the incentive to invest plainly declines.”¹⁵ Having a competitor deploy its own facilities also provides the seeds for product/service differentiation.¹⁶ As Justice Breyer emphasized in *Iowa Utilities Board*, “[i]t is in the unshared, not in the shared, portions of the enterprise that meaningful competition would

degree) to natural monopoly, can hardly be said to strike such a balance. The Local Competition Order reflects little Commission effort to pin “impairment” to cost differentials based on characteristics that would make genuinely competitive provision of an element’s function wasteful.

¹² The D.C. Circuit in *USTA* elaborated on the build/lease dichotomy at the center of the unbundling determination by noting that the key question is whether it would make economic sense for a competitor to duplicate an “essential facility.” *Id.* at 426. (“The doctrine’s basic idea is that where one firm controls some facility (such as a bridge) that is essential for competition in a broader market, and it would make *no economic sense* for competitors to duplicate the facility, and certain other criteria are satisfied, see generally Phillip E. Areeda & Herbert Hovenkamp, 3A Antitrust Law PP 771-73 (1996), the owner may be compelled to share the facility with its competitors.” (*Emphasis in original.*))

¹³ *Triennial Review Order*, 18 FCC Rcd at 17142-43 ¶ 274.

¹⁴ *Id.* at 17143 ¶ 275.

¹⁵ *USTA*, 290 F.3d at 425, citing, *Iowa Utilities Board*, 525 U.S. at 428-29 (Breyer, J., concurring in part and dissenting in part); cf. *FPC v. Hope Natural Gas Co.*, 320 U.S. 591, 647-53, 88 L. Ed. 333, 64 S. Ct. 281 (1944) (Jackson, J., dissenting) (discussing supply implications of cost-based regulation of natural gas production).

¹⁶ *Triennial Review Order*, 18 FCC Rcd at 17141-42 ¶ 272.

likely emerge.”¹⁷ Since the fundamental goal of the Act is to create a pro-competitive deregulatory framework that would lead to the deployment of advanced telecommunications services, it made eminent sense for the Commission to refrain from applying onerous unbundling obligations on fiber and hybrid loops that CLECs were generally equally capable of providing and that could support the next generation of broadband services.

The Commission’s rules on fiber and hybrid loops were not a shot in the dark, but the product of its analysis of an extensive record that (1) demonstrated CLECs would not be impaired without access to such facilities and (2) deregulation of such facilities would spur competition and investment. The approach was by no means an “experiment” but a predictive judgment rooted in nuanced analysis, and the success of the approach has vindicated the Commission’s determination.

B. The Commission’s Predictive Judgment Has Been Borne Out.

Cbeyond contends that the Commission’s “experiment” in deregulation in the broadband market as a means of promoting deployment and adoption has been a failure in the small business market.¹⁸ Cbeyond bases its conclusion on its “experience” in the market that service providers in “many cases do not offer and, in virtually all cases, do not proactively market to small businesses the applications that take advantage of the capacity that fiber and hybrid loops can deliver.”¹⁹ Qwest notes that Cbeyond appears to define the small business market it serves as including businesses with up to 250 employees -- which includes medium-sized businesses.²⁰ Cbeyond contends that these businesses are denied access to a sophisticated portfolio of business

¹⁷ *AT&T v. Iowa Utilities Board*, 525 U.S. 429 (Breyer, J., concurring in part and dissenting in part).

¹⁸ Cbeyond Petition at 12.

¹⁹ *Id.* at 16.

²⁰ *Id.*

applications at prices suitable for small and medium-sized businesses that take advantage of capacities above the T-1 level. As a result, from Cbeyond's vantage point, small and medium-sized businesses are "relegated to the limited capacity world of T-1 facilities." Cbeyond's portrayal of this market is not accurate.

First of all, Qwest and other providers already provide a host of services to small and medium-sized business customers, and new innovative services are being offered on a regular basis as technologies evolve. A small business customer would need to look no further than Qwest's web site to find a suite of services and products specifically designed for small businesses. Qwest has a full time sales and marketing team that is *focused exclusively on the small business market*, which in Qwest's experience, is subject to intense competition. On the Qwest web site,²¹ small business customers can find information about the following products:

Qwest Core Connect

Qwest® Core Connect™ delivers a single, reliable solution for voice and data connectivity that simply works. It is the perfect mix of business phone, high-speed Internet, business e-mail and website services essential for small business success. The customer receives the core features needed to run their business, with the help and support they expect from an innovative solutions provider like Qwest.

Qwest iQ Integrated Access

The Qwest iQ® Integrated Access Package integrates local and long-distance voice services with Internet access on the same reliable circuit. It works with the customer's existing equipment and uses Voice over Internet Protocol (VoIP) technology to dynamically allocate bandwidth between voice and data in real time. The customer receives high IP quality for up to 46 lines.

²¹ These products can be found on Qwest's website at:
<http://www.qwest.com/smallbusiness/products/index.html#CO>.

The product catalogs which include detailed product descriptions and pricing for these services can be found at: http://www.qwest.com/smallbusiness/bundled_services/.

Qwest Primary Rate Service (PRS) + iQ Data

The Qwest Primary Rate Service (PRS) + iQ Data® Bundle combines two powerful packages into an extremely flexible and highly customizable network solution for businesses of all sizes.

It offers everything necessary to link and streamline operations for multiple office locations, arming the customer with the tools to seamlessly share all types of information even from remote locations.

Qwest Primary Rate Service (PRS)

Qwest Primary Rate Service (PRS) is an all-in-one package with a strategic mix of advanced digital communication tools. It works with the customer's existing phone lines to give them powerful digital phone service that supports global connectivity and simultaneous Internet access, data file transfer, voice calls, fax transmission and video traffic at higher data speeds.

A scalable business-class networking solution, the Qwest iQ® Data Bundle provides the customer everything they need to tie together multiple office locations. It streamlines the customer's operations saving them time, so they can focus on their business goals.

Qwest iQ Managed VoIP Bundle

The Qwest iQ Managed VoIP Bundle meets all the customer's local, long distance and Internet needs in one powerful, integrated and managed communication platform.

In addition, Qwest offers many additional advanced products to larger businesses that would fit into Cbeyond's market of businesses with less than 250 employees. Cbeyond posits that given access to fiber and hybrid loops, it can develop a series of business applications for small businesses that heretofore have been limited to large businesses. According to Cbeyond, these applications include virtualized desktops, remote desktop management, high-resolution video conferencing, broadcast/live video streaming, robust data protection, sophisticated video security systems, cloud computing and software as a service.²²

Qwest classifies these types of services as "highly customized technology services." The technologies required to offer such services have only been introduced to the market within the

²² Cbeyond Petition at 18.

past two years and are still being vetted out from a standards and technology perspective.

Software as a Service (SaaS) and High-Definition Video Conference provide examples of applications where standards bodies are just now evolving. As a result, early adopters have been the large companies, and in some cases, medium-sized businesses, that can afford to invest in proprietary dedicated hardware and custom deployments. However, Qwest is actively striving to understand the technology evolution, adoption, scale and costs with the goal to enable these advanced services for all segments of the market. Qwest has already begun to deploy advanced multi-media messaging platforms, SaaS services and Data Protection services that are designed to be within the reach of small business budgets. The descriptions for certain Qwest conferencing and managed network services applications -- which are available today -- are attached as Exhibit A.

Cbeyond implies that the availability of these types of services to small and medium-sized business customers will only occur if Cbeyond is able to access fiber and hybrid loops on an unbundled basis. This is not the case. In reality, Qwest and many other providers are already moving to provide such services to medium and small businesses, and availability will expand rapidly without the unbundling of fiber and hybrid loops.

The product and service alternatives that small and medium-sized business customers demand are not limited to Cbeyond or Qwest. Cox, Comcast and other cable providers as well as many other CLECs are offering an increasing array of services to meet the demands of the small and medium-sized business market.

As a threshold matter, the idea that a secondary player in the broadband market, *i.e.*, ILECs, be subject to potentially destructive regulation based simply on the alleged marketing

preferences of the dominant player, *i.e.*, the cable companies is ludicrous. Nonetheless, Cbeyond discounts the significance of cable providers in the small business market, arguing that:

Cable operators have focused on the very smallest businesses, such as the small office/home office, or SOHO sector. They have not, as a general matter, focused their marketing efforts or their application portfolio on the critical business sector of companies with between 5 and 250 employees.²³

As a threshold matter, the idea that a secondary player in the broadband market, *i.e.*, ILECs, be subject to potentially destructive regulation based simply on the alleged marketing preferences of the dominant player, *i.e.*, the cable companies is ludicrous.

This is simply not accurate, as the major cable companies in the Qwest region, including Comcast, Cox, Mediacom and Bresnan have all focused on providing communications services to the small- and medium-sized business market. For example, while Cox is a major competitor in the residential market, it also competes vigorously with Qwest in the business market, providing a broad range of business products to small, medium and large business customers throughout its serving area.²⁴ Cox offers voice telephone service, high-speed Internet, digital trunks, Centrex service, long distance and “toll free” services, private line service (DS1, DS3 and OC3 to OC192), transparent LAN service, virtual private network service and business video service.²⁵ In fact, Cox has established a separate marketing division, Cox Business Services, focused specifically on the small, medium and Enterprise business market segments.²⁶ Cox markets these services aggressively to small and medium business customers, as its “Cox Business” web site attests.

²³ *Id.* at 17.

²⁴ See: http://www.coxbusiness.com/systems/az_phoenix/index.html.

²⁵ See: <http://www.cox.com/arizona/business/services.asp>.

²⁶ See: <http://www.coxbusiness.com/index.html>.

Comcast also aggressively competes nationally in the small and medium-sized business market throughout its serving area, offering voice, Internet, Ethernet and TV services that are targeted to small and medium-sized business customers.²⁷ To illustrate how Comcast competes with ILECs such as Qwest in the small and medium-sized business market, attached as Exhibit B is a comparison of Comcast's "Business Class" services with similar services provided by Verizon, Qwest and AT&T. This comparison was downloaded from the Comcast web site.²⁸

In its 3Q09 earnings report, Comcast reiterated its commitment to the small and medium-sized business market. In fact, Comcast announced that, for small businesses with less than 20 employees, its goal is to "capture 20-25% of the \$12-\$15 billion market opportunity."²⁹ Comcast also re-stated its commitment to expanding its presence in "medium-sized . . . businesses with 20-250 employees," which it sees as a "\$10-\$15 billion market opportunity."³⁰ Comcast has reported steadily increasing business services revenues, which increased from \$394 million in 2007 to \$558 million in 2008. For the first nine months of 2009, revenues have shown robust growth in each quarter -- with revenues of \$590 million for just nine months.³¹ See Exhibit C. In addition, Comcast recently filed a petition with the Commission regarding its proposed acquisition of Cimco, a CLEC that caters almost exclusively to the small- and medium-size business market.³²

²⁷ <http://www.comcast.com/corporate/Learn/Business/business.html?fss=business%20products>.

²⁸ See: <http://business.comcast.com/comparison/compare.aspx>.

²⁹ See: <http://files.shareholder.com/downloads/CMCSA/789830167x0x329413/dad4c696-0929-49e3-ad34-2ab8e8d05ff0/ComcastQ3Slides.pdf>.

³⁰ *Id.*

³¹ *Id.*

³² See *Application Filed for the Acquisition of Certain Assets and Authorizations of Cimco Communications, Inc. by Comcast Phone LLC, Comcast Phone of Michigan, LLC and Comcast Business Communications, LLC*, filed Oct. 7, 2009 and Public Notice, WC Docket No. 09-183, FCC 09-104, rel. Dec. 1, 2009.

Cbeyond argues that cable companies are ill-suited to be real competitors for small and medium-sized business, and alleges that they are not likely to offer the advanced services that these customers demand. There is certainly no evidence that this is the case, as Cox, Comcast and other cable providers have made a significant commitment to the small business market. They will continue to expand their offerings to provide the latest technologies, just like ILECs and CLECs will. It is folly to think that these large and well-capitalized companies will simply cede the market for advanced business services, and that only Cbeyond will be able to provide the advanced services these customers need.

It is significant that cable companies have been significantly expanding their broadband reach, and pouring billions of dollars into upgrading their networks. For example, cable companies have been investing in upgrading their networks to the DOCSIS 3.0 standard, which allows far greater broadband speeds. According to the *Broadband in America Report*, “Cable broadband upgraded to DOCSIS 3.0 is becoming widely available today at advertised speeds as high as 50 megabits downstream (with one firm advertising 101 megabit speeds)” and 20 mbps upstream.³³ Comcast has been particularly aggressive in adding DOCSIS 3.0 capability to its network. According to Stephen Burke, Comcast’s Chief Operating Officer:

DOCSIS 3.0 allows you for the first time to really dramatically increase your capacity for high-speed. . . DOCSIS 3.0 allows you to do something called channel bonding, which means putting together channels so you can really get data speeds that are 100 meg if you want.

And so we decided to try to get 80% of the company DOCSIS 3.0 compliant as quickly as possible by the end of this year and we’ve done that, and again when you’re competing with DSL, which is all our competition in 75% of the country, and they struggle to get five meg and you can offer 50, 75 or 100 and you have all these services doing very, very high-quality video or high-quality gaming or

³³ *Broadband in America Report*, Where It Is and Where It Is Going; Preliminary Report Prepared for the Staff of the FCC’s Omnibus Broadband Initiative, by Robert C. Atkinson & Ivy E. Schultz, dated Nov. 11, 2009 at 21 and 33.

everything else, I think those kinds of investments are what's going to really power the next generation of growth on the DOCSIS side.³⁴

There are also numerous other CLECs that serve Cbeyond's target market -- the market for businesses with less than 250 employees. In the Qwest region, these CLECs include tw telecom, Integra, PAETEC/McLeod, XO and many others. These CLECs compete with Qwest, Cbeyond, cable companies and other CLECs to meet the evolving needs of small and medium-sized businesses. While Cbeyond seeks to portray itself as the one CLEC that can serve these customers' growing and evolving needs -- if only it has access to fiber and hybrid loops -- the fact is, many CLECs are focused on meeting the needs of these customers, and they are doing so today without access to unbundled fiber and hybrid loops. For example, consider two of the major CLECs active in the Qwest region who are focusing on the business market: tw telecom and Integra:

- tw telecom is a facilities-based CLEC operating in 75 markets encompassing 30 states.³⁵ tw telecom focuses on the small, medium and Enterprise business markets, and offers a wide range of telecommunications services including business voice service, dedicated high capacity services, digital trunks, ISDN, long distance, dedicated Internet access, LAN services and MPLS IP VPN service. In February 2009 tw telecom announced: "tw telecom, a leading provider of managed voice, Internet and data networking solutions for businesses, today introduced a managed customer edge router solution to compliment its existing MPLS IP VPN network capabilities."³⁶ tw telecom states on its website, "We're one of the top three business Ethernet service providers nationwide."³⁷ With regards to small business, tw telecom notes that "From local phone service to bundled packages of voice and data services, tw

³⁴ Comcast Comments at Bank of America-Merrill Lynch Conference, September 9, 2009. *See* http://files.shareholder.com/downloads/CMCSA/789830167x0x321428/bb736678-a561-44d5-bece-b201ec4e3cd3/CMCSA-Sep_9_2009.pdf.

³⁵ *See*: http://www.twtelecom.com/about_us/networks.html, visited 5-15-09.

³⁶ tw telecom Press Release, *see*: http://www.twtelecom.com/Documents/Announcements/News/2009/Managed_Services_FINAL.pdf.

³⁷ *See*: http://www.twtelecom.com/about_us/networks.html.

telecom delivers the solutions that meet the needs of small and growing businesses,” including Co-location, Native LAN, Storage Transport, Switched Native LAN, dedicated high-capacity services, voice and various bundles.³⁸

- Integra -- a major player in several Qwest markets -- is a facilities-based CLEC providing a range of services to small, medium and Enterprise business customers, including traditional voice services, DSL, broadband Internet, high bandwidth data, email and web-hosting, online data storage, integrated T-1, VPN and network solutions, metro area network and many other services.³⁹ In describing its “milestones” for 2009, Integra states: “Integra launches new Broadband Internet service that offers small and medium-sized businesses enterprise-level Internet access at rates that fit the small- and medium-sized business budget. The new service combines the bandwidth potential of Integra’s metropolitan fiber networks with two phone-grade copper lines to deliver download speeds of 5, 15 and 25 Mbps and upload speeds of up to 2 Mbps within most of the markets Integra serves.”⁴⁰

C. There Has Been Substantial ILEC Fiber Investment in the Post-*Triennial Review Order* Years.

There is no basis for Cbeyond’s claims that the *Triennial Review Order* did not incent ILECs to invest in broadband and other technologies. In reality, ILECs have invested heavily in the provision of broadband services such as DSL, FTTN and FTTH since the Commission’s non-impairment finding in 2003. According to the Commission’s latest “High-Speed Services for Internet Access” report (showing data as of June 30, 2008), the total number of high-speed lines in service across all modalities has grown dramatically in the United States -- from 23.0 million lines in June 2003 to 132.8 million lines in June 2008, an increase of over 470% in five years.⁴¹ While wireless broadband has exploded over 14,000% in five years, the type of wireline

³⁸ See: http://www.twtelecom.com/cust_solutions/sm_med_biz_sol.html.

³⁹ See: <http://www.integratelecom.com/services/>.

⁴⁰ See: http://www.integratelecom.com/about/company_milestones.php.

⁴¹ *High-Speed Services for Internet Access: Status as of June 30, 2008*, Industry Analysis and Technology Division, Wireline Competition Bureau, rel. July 2009, Table 1 (FCC Broadband Report).

broadband typically provided by ILECs -- primarily DSL and fiber -- has also increased dramatically. For example, ADSL lines increased from 11.4 million in June 2003 to 29.96 million in June 2008, an increase of 162%, and fiber broadband lines increased from 0.13 million to 2.3 million, an increase of over 1700%. Significantly, since 2003, DSL and fiber broadband lines have increased far more rapidly than cable modem lines, which increased from 18.6 million to 38.19 million -- or 105%. Thus, since the Commission's *Triennial Review Order* decision, DSL and fiber have gained ground on cable modem service.

ILECs have also reported significant increases in the number of DSL broadband lines since June 2008 -- the date of the FCC report cited above. For example, Qwest reported an increase in mass market broadband subscribers from 0.64 million in 2003 to 2.95 million in September 2009.⁴² Verizon reported that, as of the third quarter of 2009, it now serves 9.174 million broadband customers, including 3.28 million FiOS FTTH high-speed Internet customers.⁴³ Verizon's overall broadband lines have increased over 30% since December 2006 and its FiOS lines have increased almost 50% in the last year alone.⁴⁴ AT&T reported 15.6 million broadband lines as of the third quarter of 2009, up from 14.1 million as of the end of 2007.⁴⁵ These results hardly support the contention that the Commission's *Triennial Review Order* decision (and its 2003 *Line Sharing* order) did not incent broadband investment. In fact, a recent study found that broadband growth appears to be negatively correlated with regulation:

⁴² Qwest 3Q09 Earnings Release. See: <http://investor.qwest.com/earningsarchive>.

⁴³ *Id.* See also: http://investor.verizon.com/financial/quarterly/vz/3Q2009/supplemental_schedule_3Q09.xls?t=633956169991380665 and <http://investor.verizon.com/news/20091026/20091026.pdf?t=633956176381849415>.

⁴⁴ See: http://investor.verizon.com/financial/quarterly/vz/3Q2009/supplemental_schedule_3Q09.xls?t=633956169991380665.

⁴⁵ See: http://www.att.com/Investor/Growth_Profile/download/master_Q3_09.xls.

Prior to 1Q2003, cable modem service was unregulated (and has remained so), while digital subscriber lines (DSL) were subject to network unbundling mandates. Those rules were effectively lifted in 1Q2003 and 3Q2005. Across regimes, subscriber growth appears significantly and negatively correlated with regulation. By year-end 2006, DSL subscribership was about 65% above the trend established in the regulated pre-1Q2003 era, a difference of eight to ten million households.⁴⁶

This robust deployment response is inconsistent with the view that broadband regulation promotes innovation that spurs infrastructure investment or deployment.⁴⁷

In seeking to advance its unsupported assertion that the Commission's 2003 *Triennial Review Order* did not incent ILEC's to invest in broadband networks, Cbeyond cites, as its "evidence," a study performed by Economics and Technology, Inc. (ETI) which purports to show that "incumbent LEC network investment 'decreased sharply' after 2001, when the FCC began pursuing its deregulatory agenda."⁴⁸ Essentially, the ETI Study observes that ILEC capital expenditures were high in the "regulation" era from 1996 through 2001, and then declined significantly in the so-called "deregulation" era of 2002 to 2007.⁴⁹ According to Cbeyond, this investment decline "proves" that the Commission's actions did not stimulate ILEC investments in broadband and other advanced services, and that the Commission's "predictive judgment" is false.

ETI's claim strains credulity. Even a cursory view of what has happened in the industry over the past 15 years reveals the extreme flaws in Cbeyond/ETI's logic and conclusions. The ETI Study correctly notes that capital outlays by Qwest and other RBOCs in general declined significantly after 2001, and remained lower for the next several years. However, the major

⁴⁶ Hazlett, Thomas, *Natural Experiments in U. S. Broadband Regulation*, Review of Network Economics, Vol. 7, Issue 4, December 2008 at 460.

⁴⁷ *Id.* at 477.

⁴⁸ Cbeyond Petition at 15.

⁴⁹ Lee L. Selwyn, *et al.*, Economics and Technology, Inc., *The Role of Regulation in a Competitive Telecom Environment: How Smart Regulation of Essential Wholesale Facilities Stimulates Investment and Promotes Competition* at 23 (Attachment B to Cbeyond Petition).

factor behind this decline had little to do with “deregulatory” decisions by the Commission. It is no secret that capital investment outlays by ILECs -- and by most other technology companies -- were in hyper-drive in the late 1990s and into 2001. During this timeframe, Qwest (and the former U S WEST) was investing heavily in building a new fiber network. In addition, Qwest and other ILECs were investing heavily to meet the requirements of the Telecommunications Act of 1996 (*e.g.*, developing the Operating Support Systems needed to provide Unbundled Network Elements and Interconnection). Qwest reported 8.99 billion in capital expenditures in 2000 and \$8.54 billion in capital expenditures in 2001.⁵⁰

The high level of investment by Qwest and other ILECs coincided with the infamous “technology bubble” that burst in the 2000-2001 timeframe. After the technology bubble burst, Qwest’s capital expenditures declined rapidly, just like the capital expenditures of many other technology companies. During 2002, Qwest’s capital expenditures were reduced to \$2.8 billion for the year. Overall capital expenditures fell further to \$2.09 billion in 2003 and \$1.73 billion in 2004.

Incredibly, the ETI Study *does not even mention* the technology bubble or the general economic situation that existed after 2001 as a possible factor in the reduced investment expenditures. Instead, Cbeyond, with its ETI Study, attempts to tie the reduced capital expenditures in the time period following the bursting of the technology bubble to the Commission’s regulatory actions. In retrospect, it is clear that capital expenditures across the industry may have been too high in the late 1990s into 2001, and there is no way that these levels could be maintained on a going-forward basis, regardless of any Commission regulatory actions. It is disingenuous to argue that reduced *total* capital expenditures in the post-2001 era prove that

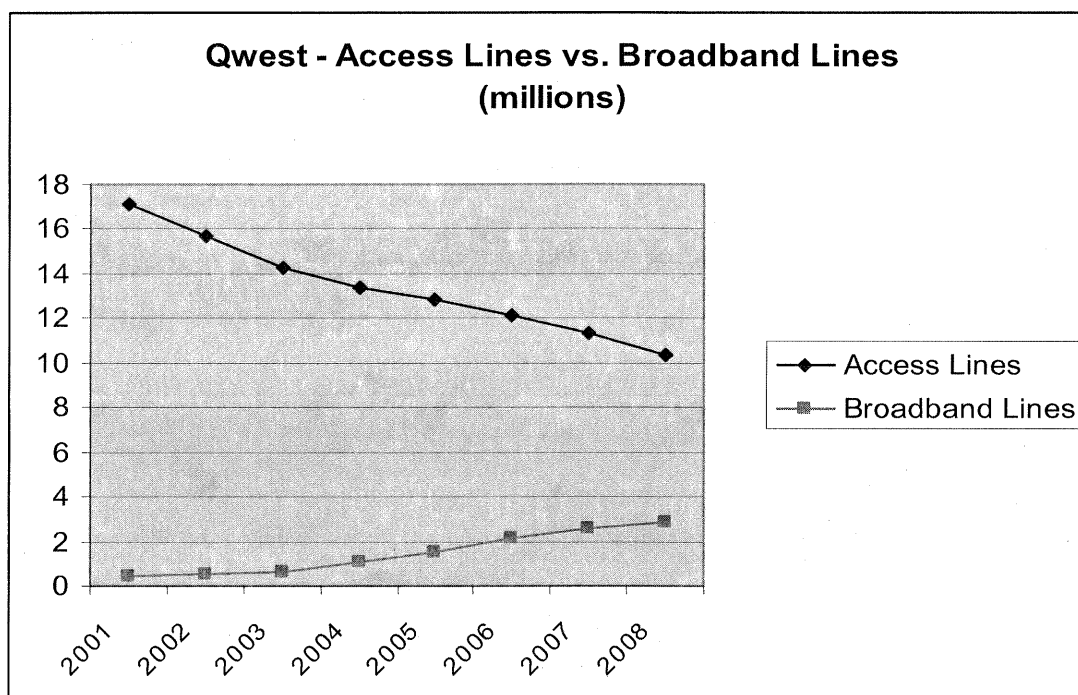
⁵⁰ See: <http://investor.qwest.com/earningsarchive>.

the Commission's non-impairment decision -- which occurred in 2003 -- has somehow failed to stimulate broadband investment.

Cbeyond concludes that because (1) *total* capital expenditures by ILECs after 2001 were lower than total capital expenditures before 2002, and (2) subsequent *total* capital expenditure levels have increased only slightly, there is no evidence that ILEC's have been incented to invest in broadband. Cbeyond states that "from an already reduced level, incumbent LEC investment held fairly constant and rose slightly. . . . contrary to the expectations of the FCC when it issued the *Triennial Review Order* and related decisions."⁵¹ However, the level of *total* capital expenditures for Qwest and other ILECs is not an indicator of *broadband* or advanced services investment. It is true that Qwest's total annual capital expenditures have remained relatively constant since 2004, ranging from between \$1.6 and \$1.8 billion per year.⁵² However, these relatively constant *total* capital expenditure numbers mask the underlying investment trend. Since the turn of the century, Qwest and other ILECs have been experiencing steady losses in traditional wireline services (switched access lines) coupled with growth in broadband services. A comparison of Qwest access lines versus broadband subscribers since 2001 is instructive:

⁵¹ Cbeyond Petition at 15-16.

⁵² See: <http://investor.qwest.com/earningsarchive>.



While traditional access lines have decreased almost 40% since 2001, broadband lines (e.g., DSL) have increased over 500% in the same time period. As Qwest traditional access lines have declined, there is a decreasing need to make capital expenditures to grow the traditional circuit switched network. At the same time, there is an increasing need to spend capital dollars on the expanding broadband network. Thus, while *total* capital expenditures have remained relatively constant, the mix of these expenditures has shifted in the past several years.

Qwest has been investing heavily over the past several years in its broadband network. In just the last year:

- Qwest has invested significant sums to increase its broadband capability through its FTTN initiative. On July 20, 2009 Qwest introduced the next evolution of its high-speed Internet services, delivering downstream connection speeds of 40 Mbps and upstream speeds of 20 Mbps. "Using next-generation VDSL2 broadband technology, Qwest doubles its fastest downstream connection speeds and increases upstream speeds -- among the fastest available in the country -- for qualifying residential and small-business customers."⁵³ This VDSL technology expands on Qwest's FTTN

⁵³ Press Release, July 20, 2009, see: <http://news.qwest.com/VDSL2>.

deployment, which has reached more than 2 million potential customers in its local service region. According to Qwest's 3Q09 Earnings Announcement, "Qwest continued to make strong progress on expanding broadband capabilities in the third quarter. Fiber to the node (FTTN) was deployed to more than 500,000 additional homes during the quarter. Qwest's FTTN footprint now reaches more than three million homes. In the quarter, 71,000 customers added broadband services that utilize the fiber network."⁵⁴

- On September 2, 2009 Qwest announced that it was enhancing its nationwide network with breakthrough technology that will position Qwest to deliver speeds of up to 100 Gigabits per second (Gbps) to its customer edge sites. This build-out has begun on Qwest's network and is planned through 2010.⁵⁵
 - Qwest's objective with this network upgrade is to deliver more powerful capabilities to its customer base, including global enterprises and governments.
 - Additionally, this upgrade directly addresses and alleviates pressure on the network backbone. Internet traffic is doubling approximately every 19 months. And each year, individual Internet users consume approximately 43 percent more bandwidth than the previous year.⁵⁶
- On October 15, 2008 Qwest announced a significant expansion of its global Ethernet services portfolio. The services enable business customers in more markets to scale their bandwidth needs and use the flexibility of Ethernet to transmit data between multiple locations. Qwest rolled out Ethernet service in 759 new cities, bringing its total number of U.S. cities served to 1,129.⁵⁷
- On December 16, 2009 Qwest began expanding its Ethernet portfolio with a new 3-, 5-, 7-Mbps metro optical Ethernet solution. Qwest is introducing the service in Phoenix, Tucson, Flagstaff, Yuma, and Omaha with plans to expand to other markets within the Qwest 14-state region. This new service is ideal for businesses, organizations and agencies interested in a competitively priced, secure local area network (LAN) for data transmission.

Other ILECs have also been investing heavily in deploying broadband networks.

Verizon has spent billions over the past few years to deploy its FTTH network. As of 3Q09, 3.28 million of Verizon's 9.174 million broadband customers are now FiOS FTTH high-speed

⁵⁴ Press Release, Qwest 3Q09 Earnings Report, October 28, 2009. *See*: <http://investor.qwest.com/earningsarchive>.

⁵⁵ <http://news.qwest.com/QwestNetworkEnhancements>.

⁵⁶ *Id.*

⁵⁷ <http://news.qwest.com/index.php?s=43&item=80>.

Internet customers.⁵⁸ Verizon's overall broadband lines have increased over 30% since December 2006 and FiOS lines have increased from 2.48 million in 3Q08, an increase of almost 50% in one year.⁵⁹ According to its 3Q09 investor presentation, FTTH is now available to 14.5 million homes and the penetration rate for Internet broadband services is now 29%.⁶⁰ Verizon hopes to have its FTTH build-out complete in 2010. In addition, AT&T reported 15.6 million broadband lines as of the third quarter of 2009, up from 14.1 million as of the end of 2007.⁶¹

D. Re-imposing Unbundling Requirements for Fiber and Hybrid Loops Would Discourage Future Investment, Reducing Consumer Welfare.

Cbeyond and ETI argue that:

[T]here has been no dramatic jump in RBOC investment since deregulatory concessions have been implemented. Indeed, the level of investment that the RBOCs committed to and spend in this latter period is *neither extraordinary nor particularly risky*. The Bell broadband investments of recent years represent *modest steps in their networks' ongoing evolution*.⁶²

Thus, Cbeyond and ETI casually discount the risks taken by ILECs in building broadband networks. There is no basis for this unsupported opinion. Verizon, for example, took on significant risks in building its FTTH network -- risks that it deemed prudent based on projections that it would be able to recoup its significant investments from customers over time. However, no rational company would expend such a high level of capital expenditures if it knew

⁵⁸ *Id.* See also

http://investor.verizon.com/financial/quarterly/vz/3Q2009/supplemental_schedule_3Q09.xls?t=633956169991380665 and

<http://investor.verizon.com/news/20091026/20091026.pdf?t=633956176381849415>.

⁵⁹ See

http://investor.verizon.com/financial/quarterly/vz/3Q2009/supplemental_schedule_3Q09.xls?t=633956169991380665.

⁶⁰ See <http://investor.verizon.com/news/20091026/20091026.pdf?t=633956176381849415>.

⁶¹ See http://www.att.com/Investor/Growth_Profile/download/master_Q3_09.xls.

⁶² Cbeyond Petition at 16.

it would have to turn around and provide access to its network to its competitors, which would significantly increase the risk that the capital expenditures would never be recovered. Yet Cbeyond would have the Commission require Verizon -- after risking its own capital to build its fiber network -- to be required to provide it on an unbundled basis to competitors. The simple fact is the Commission's 2003 decision encouraged Verizon to take this risk to build its FTTH network -- just the type of behavior the Commission sought to encourage -- under the assumption that it would at least have the opportunity to recoup investment from future customers. Now Cbeyond would like, after the fact, to change the rules so it can avail itself of this network without taking any of the risks that were incurred by Verizon.

Of course the same argument applies to the investments made by Qwest, AT&T and other ILECs. Encouraged by the Commission's fiber and hybrid loop non-impairment determination, Qwest has undertaken its FTTN and other capital expenditures with the understanding that it will have the opportunity to recover those investments. Qwest has risked its scarce capital to build this network, and now Cbeyond would like to gain unbundled access to this hybrid network -- again at no risk to Cbeyond.

Recent research demonstrates unequivocally that broadband providers are not currently exercising market power, and that imposing additional unbundling could have very adverse impact on ILECs.⁶³ Dr. Thomas Hazlett and Dr. Dennis Weisman recently performed an analysis of "*q* ratios" for both cable and telco broadband providers. A *q* ratio is equal to the firm market value divided by the replacement cost of tangible capital.⁶⁴ A *q* ratio above 1.0 "captures the

⁶³ *Market Power In U.S. Broadband Services*, Thomas W. Hazlett and Dennis L. Weisman, George Mason University Law and Economics Research Paper Series, 09-69, December 2009. See pages 25-30, which show that even at optimistic take rates, Verizon will be challenged to recover its FiOS investments.

⁶⁴ *Id.* at 10.

expectation of investors that the future flow of profits will be substantially in excess of costs, suggesting that supra-competitive profits are likely.”⁶⁵ Thus, a q ratio above 1.0 may be suggestive of market power, and a q ratio below 1.0 suggests that a provider is not exercising market power. Drs. Hazlett and Weisman found that the q ratios for Verizon, AT&T and Qwest are less than 1.0, with an average of 0.60, suggesting that these companies do not possess market power.⁶⁶ Drs. Hazlett and Weisman also note that “[i]nvestors see the telephone business (and its broadband and video products) as requiring heavy, ongoing capital outlays not justified by future cash flows.”⁶⁷ Drs. Hazlett and Weisman conclude:

We find no credible basis to believe that broadband providers, despite their relatively few numbers, are currently exercising market power. This is clear from focusing on the key metrics of profitability and market value, as opposed to the more arbitrary and less dynamically relevant measures of market share or operating margin. The absence of market power, as measured by q ratios that are consistently less than one, is a two-edged sword. From a static efficiency (market power) perspective, it may well suggest that there is ***no credible basis for government intervention in the form of price regulation or more intrusive unbundling obligations.*** From a dynamic efficiency (investment) perspective, the concern would be that investors are not particularly bullish on this sector and hence the prospects for continued, robust investment are not particularly promising. This begs the question of what role, if any, the government can be expected to play in stimulating investment in a sector it deems critical for economic growth and international competitiveness.⁶⁸ (Emphasis added.)

Cbeyond claims that unbundling of fiber and hybrid loops will help small business and will “spur job creation and a virtuous cycle of investment and innovation, all without any government spending.” It continues that “these benefits would come with relatively few costs to consumer welfare.”⁶⁹ In other words, now that ILECs have taken risks and invested capital to

⁶⁵ *Id.*

⁶⁶ *Id.* at 25.

⁶⁷ *Id.* at 24.

⁶⁸ *Id.* at 32.

⁶⁹ Cbeyond Petition at 21.

deploy advanced broadband networks, Cbeyond would like a risk-free invitation to the party. Of course this does not require “government spending” as the ILECs have already risked significant capital. If the Commission were to accept Cbeyond’s plea, it would have a chilling impact on future investment, and in fact would end the “virtuous cycle of investment and innovation,” not encourage it. Certainly if the Commission were to accept Cbeyond’s proposal, ILECs would have less incentive to invest in new and innovative technologies in the future, and would face a higher risk that their existing investments -- made under a different regulatory regime -- would not be recovered. In addition, there would be less incentive for CLECs such as Cbeyond to invest in broadband and other advanced services. Why would Cbeyond invest in its own facilities if it can simply buy the ILEC network risk free? The bottom line is that Cbeyond and other CLEC customers might benefit in the short run from forced unbundling, but in the long run, these customers would be worse off as investment and innovation is curtailed.

E. CLECs are Not Impaired Without Access to Unbundled Fiber and Hybrid Loops.

Cbeyond proposes that the Commission require incumbent LECs to “provide unbundled access to the packetized bandwidth of hybrid loops, FTTH loops, and FTTC loops at retail rates”⁷⁰ and that “incumbents offer a high bandwidth connection, between 6 and 10 Mbps, serving small businesses over fiber and hybrid loops at the lowest retail price offered by the incumbent LEC in the relevant MSA.”⁷¹ The Commission must reject this proposal.

First, there is no basis for the Commission to turn back the clock and require unbundling of fiber and hybrid loops under Section 251(c), or to impose a “new” UNE loop with a bandwidth between DS1 and DS3. Cbeyond states that: “It is clear that competitors seeking to

⁷⁰ *Id.* at 5.

⁷¹ *Id.* at 21.

provide broadband at capacities between those delivered by T-1 loops (1.5 Mbps) and DS3 loops (45 Mbps) are impaired without access to the loop capacity resident in fiber and hybrid loops.”⁷² Essentially, Cbeyond would like to have the Commission require ILECs to provide a “new” UNE, with a capacity of 6 to 10 Mbps, in addition to DS1 (1.544 Mbps) and DS3 (44.736 Mbps) loops, which are available at UNE rates in nearly all areas.⁷³ Cbeyond argues that it would like to provide new applications, but that it “cannot offer these applications via T-1 loops because the applications require much more bandwidth than 1.5 Mbps. Moreover, DS3 loops are too expensive to serve as a viable substitute.”⁷⁴ The fact is, however, that Cbeyond can meet its needs for bandwidth between 1.5 and 45 Mbps by purchasing multiple DS1s or a DS3, and is not impaired without access to fiber and hybrid loops.⁷⁵

Cbeyond has been purchasing DS1 and DS3 facilities from ILECs for years, and has gained a significant share of the business market where it operates based on the purchase of these UNEs. According to Cbeyond’s latest annual report:

We lease T- 1 circuits primarily from the local telephone companies on a wholesale basis using unbundled network element, or UNE, loops or enhanced extended links, or EELs. An EEL consists of a T-1 loop combined with the interoffice transport facility. This design allows us to obtain the functionality of a T-1 loop without the need for collocation in the local telephone company’s serving office. We are able to take advantage of T-1 UNE loop and UNE EELs and the associated cost-based pricing of each because we meet certain qualifying criteria established by the Federal Communications Commission, or the FCC, for use of these services and because we have built the processes and systems to take advantage of these wholesale circuits, in contrast to many competitive carriers, which lease T-1 circuits under special access, or retail, pricing. As a result of regulatory changes adopted via the FCC’s Triennial Review Remand Order, or

⁷² *Id.* at 14.

⁷³ DS1 and/or DS3 loops may not be available in limited locations where, per the *Triennial Review Remand Order*, a wire center has been determined to be “non-impaired.”

⁷⁴ Cbeyond Petition at 18.

⁷⁵ Furthermore, the UNE to which Cbeyond is seeking access is not a network element in an ILEC’s network. Cbeyond is asking that a new network element be crafted.

TRRO, we are required to lease T-1 circuits under special access pricing when serving customers in certain geographical areas within the cities we serve. See “Government Regulation.”

We employ these wholesale T-1 circuits as follows:

- *UNE loops.* A UNE loop is the facility that extends from the customer’s premises to our equipment collocated in the local exchange company end-office that serves that customer location. We employ UNE loops when we have a collocation in the central office that serves a customer. We use high-capacity T-1 unbundled loops to serve our customers.
- *EELs.* An EEL is a combination of an unbundled T-1 loop and an associated T-1 transport element that are joined together by the local telephone company at the end-office serving the customer location. This allows us to obtain access to customer premises without having a collocation at the serving central office. The current FCC rules require local telephone companies to provide T-1 EELs to carriers subject to certain local use criteria, which we meet. Once we achieve sufficient density from a remote office, we deploy a dedicated DS-3 transport and regroom the T-1 transport elements onto the DS-3 transport circuit and remove the T-1 transport elements.⁷⁶

While Cbeyond claims it is impaired without access to unbundled fiber and/or hybrid loops, it is hard to reconcile this with the success of Cbeyond’s business plan during a time period when such UNEs were not available. Even as the U.S. has experienced economic difficulties, and even as Qwest’s revenues have remained flat, Cbeyond has expanded rapidly, with revenues increasing from \$113 million in 2004 to \$346 million in 2008.⁷⁷ Cbeyond revenues were \$196 million in the first six months of 2009 alone.⁷⁸ All of this has been achieved while relying on DS1 and DS3 unbundled network elements, and without access to ILEC fiber and hybrid loops. Cbeyond cannot now credibly claim that it is impaired without access to these fiber and/or hybrid loops.

⁷⁶ Cbeyond 2008 Form 10K, *see*: <http://ir.cbeyond.net/secfiling.cfm?filingID=1193125-09-47628>.

⁷⁷ *Id.*

⁷⁸ Cbeyond Form 10Q, June 2009, *see*: <http://ir.cbeyond.net/secfiling.cfm?filingID=1193125-09-167610>.

Cbeyond has not demonstrated that CLECs are impaired without access to these facilities. A requesting carrier's ability to provide service is "impaired" if, "taking into consideration the availability of alternative elements outside the incumbent LEC's network, including elements self-provisioned by the requesting carrier or acquired as an alternative from a third-party supplier, lack of access to that element poses a barrier or barriers to entry, including operational and economic barriers, that are likely to make entry into a market by a reasonably efficient competitor uneconomic."⁷⁹ Not only has Cbeyond failed to demonstrate how it meets the impairment standard, but the factors to be considered in determining impairment, as we have demonstrated, indicate that there is no impairment regarding access to fiber and hybrid loops. Cbeyond glosses over the cable market's presence in the small business market, and has not demonstrated that this is not a viable alternative for CLECs. In fact, Granite Telecom has entered into a partnership with ABI, a private network service provider, which has relationships with nearly 200 cable suppliers. Granite states that this partnership provides:

them a national cable footprint where they provide virtual private networks (VPN) and high speed data circuits utilizing the Hybrid Fiber Coax infrastructure of their cable partners. ABI's wide scope of cable relationships will act as a supplier to strengthen Granite's service offerings to their regional and national clients.⁸⁰

This partnership should put an end to questions of cable providers not being an alternative source outside of the ILECs' networks.

Cbeyond also does not address the Commission's finding in the *Triennial Review Order* that the entry barriers for CLECs in greenfield or brownfield deployment are much lower and on a par with entry barriers ILECs face. Cbeyond also does not address how its purported suite of additional services that allegedly require unbundled fiber loops renders self-provisioning or

⁷⁹ 47 C.F.R. § 51.317.

⁸⁰ <http://www.granitenet.com/PressRoom/Pages/Articles/ABIFinalRelease.pdf>.

leasing from a third-party of fiber an uneconomic option. Cbeyond's failure to demonstrate that it meets the requirements of Rule 51.317(b) should, in and of itself, end the inquiry on Cbeyond's request.

Cbeyond can also not claim that the Commission's non-impairment decision in 2003 has discouraged its capital expenditures. Since 2004, Cbeyond capital expenditures have grown rapidly, increasing each year from \$23.74 in 2004 to \$69.94 million in 2008.⁸¹

Second, while there is no basis for the unbundling of fiber and hybrid loops at all, there is certainly no basis for the Commission to set a price for these "new" elements at the "lowest retail rate."⁸² In essence, Cbeyond asks the Commission to require unbundling per Section 251(c), but then set a rate not based on TELRIC, but based on the lowest rates an ILEC charges its retail customers for the service (*e.g.*, a 10 Mbps high-speed Internet connection). Cbeyond argues that this rate, which would be higher than TELRIC, would allow ILECs to earn a profit on the service. Cbeyond misses the point. There is no basis to require ILECs to provide fiber and hybrid loops to CLECs at *any* price, since CLECs are not impaired without access to these elements. Further, as described above, forcing ILECs to offer its broadband network on an unbundled basis to competitors would discourage investment and innovation, as the Commission found in the *Triennial Review Order*.

Third, as described below, requiring incumbent LECs to offer such a new "packetized bandwidth" service to CLECs would require significant and expensive changes to the network architecture. There is no basis to impose such costs on ILECs. And, in fact, it is the

⁸¹ Cbeyond 2008 Form 10K, *see*: <http://ir.cbeyond.net/secfiling.cfm?filingID=1193125-09-47628>.

⁸² In setting a rate the Commission must have evidence that the rate is reasonable (and that the existing rate is unreasonable). Cbeyond presents no such evidence or basis upon which such evidence might be obtained and analyzed.

significantly different network architecture needed to provide such unbundled access that would eviscerate any link between an ILEC's "lowest retail rate" and the rate needed for an ILEC to recover the cost of not only providing such a service but the cost of modifying its network to provide such a service. The lowest retail rate for a retail high-speed Internet service would be based upon an end-to-end Ethernet transmission path not a path that would require routing via a central office and the equipment necessary for a CLEC to be able to access the fiber or hybrid loop at that point. The retail rate for Qwest's High-Speed Internet product is not related to a rate for unbundled access to fiber and loops because the services are inherently different and are based on different network architecture. In addition, the prices for High-Speed Internet services also reflect the market forces where each product is offered.

F. The Costs of Providing the Access Cbeyond Seeks Far Outweigh the Benefits.

Cbeyond argues that the benefits of unbundling obligations outweigh the costs, but its cost benefit analysis is inverted. Allowing CLECs access to an ILEC's Ethernet network at the 6-10 mbps service level, as sought by Cbeyond, would lead to increased equipment and operations costs. Qwest did not develop its Ethernet network architecture to allow for third party facility access because it had no reason to expect that such access would be mandated. Such access would require routing via Qwest's legacy Time Division Multiplexing (TDM) network to enable CLEC access to the fiber facility at a central office, and this would not be efficient as compared to aggregating the traffic from various Ethernet switches to be transmitted to the IP-cloud. To tap the full efficiencies of an all Ethernet network and therefore provide the service at the lowest cost to its end-user customers, Qwest would bypass its legacy network entirely.

To provide for the service Cbeyond seeks, Qwest would have to re-engineer the network to provide for interfaces at each central office in which a CLEC seeks access to the fiber loops. To accommodate these interfaces, Qwest would need to install Gateways in each of the central

offices to enable CLEC access to the fiber facility serving the end-user customer. The Ethernet network is designed and engineered for access to only one carrier. Qwest would need to re-engineer its Ethernet switches to add low-level traffic ports to facilitate interconnection. For instance, Qwest has designed its Ethernet switches with ports designed for high-levels of aggregated traffic. Ports would need to be created on Qwest's Ethernet switches to allow the CLEC to access the fiber loop serving its end-user customer which would involve a much lower level of traffic.

The function of the Gateway is to provide Protocol Conversion, *i.e.*, to transform the Ethernet network (IP) to a TDM network. To provide the access Cbeyond seeks, an ILEC would need to outfit a central office with the Gateway and other necessary equipment to facilitate the Protocol Conversion. Furthermore, since Qwest would be increasing the number of ports in these switches, this would lead to added failure points in the Ethernet network and the increased costs of addressing those failure points. Thus, the Protocol Conversion needed to facilitate the unbundled access significantly diminishes the efficiencies inherent in the all-Ethernet network.

Allowing access by CLECs to the IP interface would also raise additional technical and operational issues. Network Management and Operational Support Systems (OSS) would also need to be developed to allow for these unbundling requirements, since current OSS deployment does not allow for segregation of data between multiple carriers. New Ordering and Maintenance interfaces would need to be developed to all multiple carrier access. These new interfaces are very time and resource-intensive. In sum, implementation of the Cbeyond Petition would increase ILECs' costs, and could provide upward pressure on rates (including the "lowest offered rate") charged to end users.

III. CONCLUSION

For the foregoing reasons, the Commission should summarily dismiss the Cbeyond
Petition.

Respectfully submitted,

QWEST COMMUNICATIONS
INTERNATIONAL INC.

By: /s/ Harisha J. Bastiampillai
Craig J. Brown
Harisha J. Bastiampillai
Suite 950
607 14th Street, N.W.
Washington, DC 20005
(303) 383-6671
Craig.Brown@qwest.com
Harisha.Bastiampillai@qwest.com

Its Attorneys

January 22, 2010

ATTACHMENT C

Before the
FEDERAL COMMUNICATIONS COMMISSION
Washington, DC 20554

In the Matter of:)	
)	
Cbeyond, Inc. Petition for Expedited)	WC Docket No. 09-223
Rulemaking to Require Unbundling of)	
Hybrid, FTTH, and FTTC Loops)	
Network Elements Pursuant to 47)	
U.S.C. §251(c)(3) Of the Act)	

REPLY COMMENTS OF QWEST COMMUNICATIONS INTERNATIONAL INC.

Craig J. Brown
Harisha J. Bastiampillai
Suite 950
607 14th Street, N.W.
Washington, DC 20005
(303) 383-6671
Craig.Brown@qwest.com
Harisha.Bastiampillai@qwest.com

Attorneys for

QWEST COMMUNICATIONS
INTERNATIONAL INC.

February 22, 2010

TABLE OF CONTENTS

	Page
I. INTRODUCTION AND SUMMARY	1
II. THE BENEFITS OF RELIEF FROM FIBER UNBUNDLING ARE TANGIBLE AND READILY APPARENT	3
A. Relief From Fiber Unbundling Has, And Continues To Generate Significant Investment.....	4
B. Qwest Is Placing A Significant Priority On The Small And Medium-Sized Business Market.	4
C. The Small Business Market Has Numerous Competitive Options In Addition To Qwest.	7
III. THE CLECS' REQUESTS FOR UNBUNDLING AND COST-BASED PRICING PROPOSALS IGNORE THE PROCESS FOR DETERMINING IMPAIRMENT.....	11
A. Some Commenters Dramatically Understate The Record That Would Be Necessary For The Commission To Enter An Order Requiring The Unbundling Requested In The Cbeyond Petition.....	12
B. Any Discussion Of Pricing Is Premature.	15
IV. THE CLECS' EXPANDING WISH LIST DEMONSTRATES THAT MANDATORY UNBUNDLING IS NOT THE SOLUTION TO THE CLECS' PURPORTED PROBLEM.....	17
A. The CLECs Are Essentially Asking The Commission To Require ILECs To Maintain And Support Fiber And Copper Networks.....	17
B. Qwest's Limited Copper Retirement Is Not Impinging On CLECs' Access To Copper.....	18
C. The Berkman Study Does Not Further The Case For Mandatory Unbundling.....	19
V. THE QSI STUDY PROVIDES A FLAWED AND DISTORTED VIEW OF THE BENEFITS OF MANDATORY UNBUNDLING	22
A. Self-Provisioning Is A Viable Option For CLECs.....	22
B. QSI's Inaccurate Determination Of The Costs Of Wholesale Inputs Discredits Its Price Squeeze Argument.....	24

C.	QSI's Flawed Network Modeling Understates The Real Cost Of CLEC Self-Provisioning.....	27
VI.	CONCLUSION	32

Before the
FEDERAL COMMUNICATIONS COMMISSION
Washington, DC 20554

In the Matter of:)	
)	
Cbeyond, Inc. Petition for Expedited)	WC Docket No. 09-223
Rulemaking to Require Unbundling of)	
Hybrid, FTTH, and FTTC Loops)	
Network Elements Pursuant to 47)	
U.S.C. §251(c)(3) Of the Act)	

REPLY COMMENTS OF QWEST COMMUNICATIONS INTERNATIONAL INC.

I. INTRODUCTION AND SUMMARY

Qwest Communications International Inc. (Qwest) submits these reply comments in response to the Commission's *Public Notice* in the above-referenced docket.¹

In its Petition for Expedited Rulemaking, Cbeyond proposes that the Commission require incumbent LECs to "provide unbundled access to the packetized bandwidth of hybrid loops, FTTH loops, and FTTC loops at retail rates"² and that "incumbent LECs offer a high bandwidth connection, between 6 and 10 Mbps, serving small businesses over fiber and hybrid loops at the lowest retail price offered by the incumbent LEC in the relevant MSA."³

In its initial comments, Qwest demonstrated that the relief sought by Cbeyond is inconsistent with the Act's impairment standard, ignores the tremendous fiber buildout that followed the Commission's elimination of unbundling requirements applicable to fiber based facilities and neglects the tremendous negative impact on further fiber deployment that would result from additional unbundling requirements. The FCC's elimination of unbundling for fiber

¹ *Public Notice*, WC Docket No. 09-223, Pleading Cycle Established for Comments on Petition for Expedited Rulemaking Filed by Cbeyond, Inc., DA 09-2591 (Dec. 14, 2009).

² Cbeyond Petition at 5.

³ *Id.* at 21.

and hybrid loops in 2003 was rooted in the Commission's determination that CLECs are not impaired without access to fiber and hybrid loop facilities. In eliminating these requirements, the Commission applied the impairment standard that was refined and finally approved by the D.C. Circuit.⁴ That standard is designed to promote the pro-competitive deregulatory goals of the Act by providing the correct incentives for all carriers to deploy their own fiber facilities. The Commission's judgment that eliminating fiber and hybrid loop unbundling would spur network investment has been more than borne out by the substantial BOC investment in fiber even in the face of less-than-favorable market conditions. The Economics and Technology, Inc. (ETI) study -- which purports to show the contrary is erroneous.⁵ Moreover, the fundamental premise of the Petition, *i.e.*, that the unbundling relief did not bring competitive options to the small business market is contradicted by the many competitive options available to small businesses today.⁶ A reversal in course on fiber and hybrid loop unbundling would imperil future investment and ultimately reduce consumer welfare.⁷ Indeed, the limited benefits of fiber and hybrid loop unbundling are far outweighed by the significant costs such unbundling would impose -- including the stifling of fiber investment.

The first round of comments brought the anticipated CLEC support of the Cbeyond petition. It brought a lot more as well, as the CLECs treat the petition for rulemaking as a vehicle to impose additional requirements on the proposed ILEC fiber and hybrid loop unbundling scheme. Again with no reference to the concept of impairment, the CLECs requested particularized requirements tailored to their individual business plans. The sum of

⁴ Qwest Comments at 1.

⁵ *Id.* at 1-2, 7-9.

⁶ *Id.*

⁷ *Id.* at 25-26.

these requirements would be mandated access to ILEC fiber and copper networks at reduced prices. The CLECs, along with Cbeyond, expect the Commission to turn its regulations on a dime and totally disregard the prescriptions from the Supreme Court and the D.C. Circuit as to how to promote viable and enduring facilities-based competition.

In these reply comments, Qwest reinforces its position that there is simply no market problem present that would justify the Commission changing course on fiber and hybrid loop unbundling. Indeed, there is vibrant competition in the small and medium-sized business (or SMB) market, competition that is only likely to grow more robust as companies continue to evolve and deliver new products. In any case, positing a problem is not enough, particularly given the existence of the impairment standard, which functions as a strict gatekeeper to the relief the CLECs seek. Finally, Qwest will also debunk the QSI study commissioned by certain CLECs by identifying its erroneous inputs, omissions and misconceptions.

II. THE BENEFITS OF RELIEF FROM FIBER UNBUNDLING ARE TANGIBLE AND READILY APPARENT

The premise of Cbeyond's Petition, which the other CLECs parrot, is that granting the BOCs relief from fiber and hybrid loop unbundling was a failed experiment. The CLECs contend that it did not promote investment,⁸ and left the small business market segment neglected by ILECs.⁹ Qwest demonstrated in its initial comments that Cbeyond's premise was, and remains, erroneous. The removal of fiber and hybrid loop unbundling requirements did promote investment and today the small business market has many competitive options.¹⁰

⁸ PAETEC at 6; Covad at 5.

⁹ PAETEC at 4-7; COMPTTEL at 4-6.

¹⁰ Qwest Comments at 7-9.

A. Relief From Fiber Unbundling Has, And Continues To Generate Significant Investment.

The Commission should pay particular attention to the comments of Corning Incorporated, who is “the world leader in production and sale of optical fiber and is the leading provider of optical cable in the United States.”¹¹ Corning notes that the Commission “unleashed a torrent of new capital spending on next-generation broadband networks”¹² when it determined that CLECs were not impaired without access to fiber and hybrid loops. Corning strongly opposes Cbeyond’s Petition because it understands that requiring unbundling of fiber and hybrid loops will stifle future investments in next-generation broadband networks.

As noted by Corning, the Obama administration seeks more investment in next-generation broadband networks in the U.S., and Corning as the largest fiber producer in the U.S., would certainly benefit from the realization of these goals. Significantly, Corning would likely benefit from increased broadband deployment regardless of who is building the networks; it would benefit if its fiber were used in broadband investments made by *any* entity, whether it is an ILEC, CLEC, cable company, municipal provider or any other provider. Thus, Corning supports policies adopted that would maximize the *total* deployment of these networks. It recognizes that grant of the Cbeyond Petition will result in *less* investment in total U.S. next generation broadband networks, and that the country’s overall broadband deployment goals will be threatened by the forced unbundling of fiber and hybrid loops.

B. Qwest Is Placing A Significant Priority On The Small And Medium-Sized Business Market.

The assorted proposals raised in the CLECs’ comments would only serve to broaden the regulatory shadow placed over ILEC networks. But, as Qwest noted in its initial comments,

¹¹ Corning at 1.

¹² *Id.* at 2.

before any regulatory change-of-course can even be contemplated there must be a change in circumstances such that there is a problem that needs to be addressed. Of course, the CLECs posit the “neglected” small business market¹³ as the problem the Commission needs to address on an expedited basis. But this is a straw man issue. The CLECs paint a highly misleading picture of the advanced services available to the SMB market. Looking beyond the CLECs’ fanciful characterizations to the actual reality of the SMB market reveals a market that is far from neglected. As we demonstrated in our initial comments, Qwest and other providers already provide a host of services to small and medium-sized business customers, and new innovative services are being developed and offered on a regular basis as technologies evolve. From a service perspective, Qwest has two large dedicated teams that focus on the specialized support necessary for small and medium sized businesses. Qwest small business customers have a dedicated team of small business professionals they can contact for any issue. Mid-sized business customers have a single point of contact assigned to each customer.

Contrary to CLEC assertions, as part of that specialized support, Qwest makes sure these businesses have affordable access to “big business” technology solutions. Qwest went beyond surveys or focus groups -- it followed small-business owners through their workdays and were struck by the time wasted on figuring out technology. Today, Qwest provides feature-rich high speed Internet, networking capabilities, and online tools such as website development and hosting, the ability to create multiple e-mail accounts, send faxes over e-mail and protect company data online. Qwest provides additional applications such as teleconferencing, online e-

¹³ The CLECs refer to the “small business market.” However, as noted in Qwest’s initial comments, Cbeyond’s Petition defines small businesses as businesses with less than 250 employees. Thus, this definition encompasses medium-sized businesses as well, and is normally referred to as the Small and Medium-sized Business, or “SMB” market.

commerce capabilities, security applications, collaboration tools, CRM (Customer Relations Management) applications and more.

Qwest also offers “cloud computing” options through its 17 data centers which serve 12 major markets as a part of its managed hosting service and cloud computing services. In fact, Qwest is seeing its greatest demand from business customers who are not big enough to gain the necessary economies of scale from operating their own data centers but still want security, reliability, and scalability. Qwest has found that customers are looking more critically at how they are procuring and consuming IT services and that customers see managed hosting and cloud computing as a more viable and cost-effective alternative to building things themselves. With its cloud computing options, Qwest has the ability to provide a very scalable, secure, business class, private cloud environment attached to national global assets to these customers.

Another example of Qwest’s “big business” tools for its small and medium sized businesses is the Qwest iQ® Data Bundle. This product is designed to fit a growing business’ networking needs. The iQ® Data Bundle combines data networking, local access, rental equipment, installation, maintenance, and optional security features into a single solution. It is scalable -- providing multiple bandwidth configuration options to keep small businesses in step with their mission-critical applications, regardless of the size and location of their business. It is flexible -- as the small business’ needs change, they are able to optimize bandwidth and networking hardware to cut costs and stay competitive at the same time. And, knowing that time is money to small businesses, the iQ® Data Bundle is provided with dependable service level agreements.

As demand for secure, reliable, high bandwidth connectivity continues to rise, Qwest’s Metro Optical Ethernet (QMOE™) provides a flexible, highly scalable solution that delivers

switched, Ethernet connectivity to enable healthcare providers to extend their local area networks with control over routing and traffic prioritization. It combines the simplicity and low cost of Ethernet with the speed and reliability of optical fiber to deliver flexible, highly scalable connectivity between hospitals, clinics, laboratories, and business offices across a metropolitan area.

Understanding the importance that technologically advanced capabilities will play in healthcare as initiatives driven by the American Recovery and Reinvestment Act (ARRA) are implemented, and understanding that many of these initiatives will be implemented by small businesses such as clinics and doctors' offices, Qwest offers cost effective solutions to these healthcare providers. Qwest understands healthcare providers must balance the need to implement advanced technologies to improve efficiency and the quality of care with a mandate to reduce overall healthcare costs.

These examples, along with the products and services discussed in Qwest's initial comments in this docket,¹⁴ clearly demonstrate that the bleak picture painted by CLECs regarding ILEC attention to the SMB market is far from the truth. Small and medium-sized businesses have access to a wide variety of cost-effective advanced services to fit their business needs and those needs are fulfilled without taking the draconian regulatory step of requiring Qwest to unbundle its fiber network.

C. The Small Business Market Has Numerous Competitive Options In Addition To Qwest.

Like Cbeyond, the CLECs who filed initial comments in this proceeding argue that unless ILECs are required to provide unbundled fiber and hybrid loops, small and medium-sized businesses will be denied access to a sophisticated portfolio of business applications at prices

¹⁴ Qwest Comments at 20-21 and its Exhibit A.

suitable for small and medium-sized businesses. These CLECs contend that only these CLECs have the ability or motivation to provide these “next generation” services, and that the CLECs can only serve this market if they have access to ILEC unbundled fiber and hybrid loops. These claims are not supported by the evidence. Our initial comments, in addition to describing the products Qwest offers to the SMB market, also described the offerings of cable and CLEC competitors that meet the needs of small and medium-sized businesses -- all of which are provided today in the absence of fiber and hybrid loop unbundling. For example, as we described, both Comcast and Cox today focus on providing advanced services to small and medium-sized businesses.¹⁵

In its comments, Integra and One Communications (Integra) provided a description of the types of services that small and medium-sized businesses are allegedly being denied without CLEC access to unbundled fiber and hybrid loops. According to Integra, these customers today are currently denied *Advanced Packetized Telephony Services, High Capacity Internet Access Applications, VPN and High Bandwidth Private Line Services and High Capacity Imaging and Video Services*.¹⁶ It is noteworthy that these are the exact types of services that are actively marketed by Qwest (as described above) and many of Qwest’s competitors today -- all without the use of ILEC unbundled fiber and hybrid loops. To demonstrate this, all one has to do is look at the services that are marketed to small and medium-sized businesses by Cox Communications, a major competitor in several Qwest cities including Phoenix and Omaha.

As described in Qwest’s initial comments, Cox competes vigorously with Qwest in the business market, providing a broad range of business products to small, medium and large business customers throughout its serving area. Cox offers *Advanced Packetized*

¹⁵ *Id.* at 10-15.

¹⁶ Integra at 4-5.

Telephony Services and High Capacity Internet Access Applications -- including “Cox Business Internet” and “Cox Optical Internet.” According to Cox, with these services, businesses are “connecting to Cox’s own nationwide fiber-optic IP backbone that operates over multiple redundant 10 Gigabit connections.”¹⁷ Cox also offers *VPN and High bandwidth Private Line Services*, including “Metro Ethernet Service” that, according to Cox, “delivers high-speed, metro-area-wide Ethernet connectivity that allows [a] business to employ the latest technologies, combining voice, video and data connections.” Cox notes that “Metro Ethernet can provide a higher bandwidth value than legacy technologies such as frame relay.”¹⁸ Cox also offers “Cox Virtual Private Network” service that “is a fully managed, turn-a-key-and-you’re-done solution” giving “employees in any location fast, secure access to your network.”¹⁹ Finally, Cox offers high speed private line services from DS1 all the way to OC192.²⁰

Integra also claims that small and medium-sized businesses in the medical field do not have available services that would provide customers with “the ability to transmit high-resolution medical image files and telemedicine applications.”²¹ Cox, in fact, offers and actively markets just such services. On its web site, Cox provides specific “case studies” of the services it provides to the small and medium-sized business market, including the real estate, government, education, hospitality and *healthcare* industries. The Cox website

¹⁷ See: <http://ww2.cox.com/business/arizona/data/optical-internet.cox>

¹⁸ See: <http://ww2.cox.com/business/arizona/data/metro-ethernet.cox>

¹⁹ See: <http://ww2.cox.com/business/arizona/data/vpn.cox>

²⁰ See: <http://ww2.cox.com/business/arizona/data/private-line.cox>

²¹ Integra at 5.

contains several specific case studies for healthcare providers that show how it is meeting the needs identified by Integra. One of the case studies is included as Exhibit A.

The case study in Exhibit A provides just one example of how Cox Communications is meeting the needs of small and medium-sized businesses -- all without purchasing unbundled fiber and hybrid loops from an ILEC. Of course Comcast and other cable providers also offer similar services to small and medium-sized businesses, as noted in Qwest's initial comments. Thus, the CLECs' claim that small and medium-sized business needs can only be met if CLECs are provided access to unbundled fiber and hybrid loops is not accurate.

Cbeyond and other CLECs that focus on the small and medium-sized business market have been successfully growing revenues without access to unbundled fiber and hybrid loops.²² As noted in Qwest's initial comments, Cbeyond's revenues tripled between 2004 and 2008. Revenues for other CLECs, including Integra, PAETEC and XO have also increased although much of these increases may be attributed to merger activity. One interesting case, however, is tw telecom. While tw telecom acquired Xspedius in 2006, it has continued to grow revenues organically over the past three years, even given tough economic conditions. tw telecom revenues increased from \$1.084 billion in 2007 to \$1.211 billion in 2009.²³ As noted in Qwest's initial comments, tw telecom focuses on the small, medium and enterprise business markets, and offers a wide range of telecommunications services including business voice service, dedicated high capacity services, digital trunks, ISDN, long distance, dedicated Internet access, LAN services and MPLS IP VPN service. tw telecom provides services "principally utilizing our fiber facilities" and says that it "continue[s] to extend [its] network in [its] present markets in order to reach additional office buildings and business parks directly with [its] fiber facilities." tw telecom also states that:

²² Qwest Comments at 10-15.

²³ tw telecom 2009 Earnings Report, 2-10-10.

Our focus on using our fiber facilities-based services, rather than reselling network capacity of other providers, requires that we make significant capital investments to reach new and existing customer locations. We invest selectively in growth prospects that often require that we install fiber in buildings, purchase electronics, construct fiber rings, and invest in product expansion. . . . To serve a new customer who is not in a building where we have existing facilities, we may use various transitional links, such as leased circuits from another LEC. When a customer's monthly spend increases to a sufficient level, we may invest additional capital to connect our own fiber to the customer's premises in order to accommodate the customer's bandwidth needs and to increase our operating margins."²⁴

What is interesting about tw telecom -- who did not file comments in this case -- is that it has developed its business market, and has shown rapid growth, without the ability to purchase unbundled fiber and hybrid loops from ILECs. While it still purchases some UNEs, it is following the path that Congress envisioned when it passed the Telecommunications Act in 1996 -- that UNEs would serve as a *transitional* mechanism for CLECs as they built out their network. This is in contrast to the business plans of some CLECs -- like Cbeyond -- who would apparently like to rely on ILEC networks forever, and ask the Commission to mandate new unbundled offerings for the convenience of its business plan.

III. THE CLECS' REQUESTS FOR UNBUNDLING AND COST-BASED PRICING PROPOSALS IGNORE THE PROCESS FOR DETERMINING IMPAIRMENT

The CLECs' comments devote a significant amount of attention to the type of access to fiber facilities they should be provided and how the access should be priced. But, as Qwest noted in its initial comments,²⁵ this begs the question of whether the CLECs are entitled to such access. The CLECs seem to be operating under the assumption that all they need to do is to demonstrate that unbundled access to fiber and hybrid loops would help them serve small

²⁴ tw telecom 2009 Form 10K at 5 and 9, signed Feb. 12, 2010.

²⁵ Qwest Comments at 27-29.

business customers, and then they will be entitled to unbundled access to the facilities at their desired price. But the CLECs omit a substantial part of the process for determining impairment.

A. Some Commenters Dramatically Understate The Record That Would Be Necessary For The Commission To Enter An Order Requiring The Unbundling Requested In The Cbeyond Petition.

Some commenters, echoing claims made in the Petition, seem to take the position that the Commission can lawfully order the unbundling of ILEC fiber and packet facilities and services upon a finding by the Commission that perhaps it should not have eliminated the fiber and hybrid loop unbundling rules in the first place.²⁶ The implication is that, if the FCC were to find in retrospect that the foundation of its earlier deregulatory decision was not as sound as it had hoped, that fact alone would be sufficient to reinstate the discarded unbundling regulations. This is simply not an accurate portrayal of the law.

No one doubts that the Commission has the obligation to examine its rules (or lack thereof) and make necessary modifications to adjust for changed circumstances. This is true even if such further analysis requires the Commission to reverse a prior position or analysis.²⁷ However, any change in course by a regulator must be explained and justified under the Administrative Procedure Act on the same basis as the proposal for any new rule. The Commission is rightly expected to take steps to keep its regulations up to date, something that is especially important in an area where technology and markets are changing as rapidly as they are in the telecommunications field. If a record were to be established that demonstrated that the

²⁶ See, e.g., Covad at 6 (“When its prediction is incorrect, the Commission has full right to reverse course and require more, rather than less, unbundling.”). See also PAETEC at 7 (“As a threshold matter and as the Petition explains, D.C. Circuit precedent requires the FCC to reexamine when circumstances show that the predicate for issuing the decision is not accomplishing the desired results.”)

²⁷ See *Bechtel v. FCC*, 957 F.2d 873, 881 (D.C. Cir. 1992), cert. denied, *Galaxy v. FCC*, 506 U.S. 816 (1992).

unbundling requested by Cbeyond met the “impairment test” of Section 251(d)(2) of the Act, the Commission would be well within its authority to direct state arbitrators to order such unbundling in interconnection agreements. This legal analysis is not disputed. However, the record is clear that the impairment test cannot be met for the services and facilities subject to the Cbeyond Petition -- there is no impairment without access to unbundled fiber and hybrid loops.

But Covad and PAETEC, along with Cbeyond, seem to advocate a different standard for network elements that were once required to be unbundled but were later freed from unbundling requirements by the FCC. They imply that the FCC need not undertake a full Section 251(d)(2) analysis -- based on the current record in these situations. Instead, they argue that, if the current FCC would never have eliminated those unbundling requirements in the first place, that by itself would be sufficient to resurrect the old regulatory regime. This is clearly incorrect. The Commission can grant all or part of the Cbeyond Petition only upon a proper impairment analysis, based on the current record, that demonstrates that CLECs are “impaired” in the absence of unbundled access to the elements in question.

The Commission does not have the right to take a regulatory “Mulligan” when it makes a decision to reduce the regulatory burdens imposed upon a service or facility. This is especially true in the area of regulations as dramatic and burdensome as the unbundling rules -- where the Commission’s first three attempts at establishing a lawful unbundling standard met with court reversals because they were too expansive.²⁸ The position of Covad, PAETEC and Cbeyond is really a very belated request for reconsideration of the Commission’s deregulatory orders, whereas the Cbeyond Petition must be treated as a request for a new rule. Petitions for

²⁸ *AT&T Corp. v. Iowa Utils. Board*, 525 U.S. 366, 387-92 (1999); *United States Telecom Ass’n v. FCC*, 290 F.3d 415, 427-28 (D.C. Cir. 2002); *United States Telecom Ass’n v. FCC*, 359 F.3d 554, 572-73 (D.C. Cir. 2004) (subsequent case history for each omitted).

reconsideration are governed by statute,²⁹ and the Commission does not have the ability to “reconsider” a decision many years after it was issued³⁰ -- the Commission must judge its new rules on their own merits on the current record, not based on what is tantamount to reconsideration of an old decision.³¹ Even if the Commission were to find that some of its predictions in prior unbundling decisions were incorrect (a finding that Qwest submits is simply impossible), that would not be sufficient to warrant the imposition of fresh unbundling requirements on ILECs because of the myriad of other factors that have entered into the analysis in the ensuing years. The Commission would need to affirmatively find and justify, consistent with the solid judicial precedent that must govern such decisions, that each fresh unbundling that it ordered was consistent with and justified by Section 251(d)(2) of the Act. This is a heavy burden indeed, one that Cbeyond and its supporters have not come close to meeting.

This conclusion is neither complex nor controversial. The time for reconsideration of the Commission decisions regarding the unbundling of the services and facilities raised by Cbeyond passed many years ago. Any decision granting any part of the action requested by Cbeyond

²⁹ 47 U.S.C. § 405.

³⁰ The time limits for filing a petition for reconsideration are established by law and are jurisdictional in nature. See *In the Matter of Reuters Ltd. v. FCC*, 781 F.2d 946, 951-52, 251 U.S. App. D.C. 93 (D.C. Cir. 1986). See also *Petition for Amendment of the Commission’s Rules to Establish First and Second Class Radiotelephone Operator Licenses*, Order, 10 FCC Rcd 3196 ¶ 2 (1995). We note the filing requirement of Section 405(a) of the Act applies even if the petition for reconsideration is filed only one day late. See, e.g., *Panola Broadcasting Co.*, Memorandum Opinion and Order, 68 FCC 2d 533 ¶ 2 (1978); *Metromedia, Inc.*, Memorandum Opinion and Order, 56 FCC 2d 909, 909-10 (1975). The Commission’s rules similarly limit the time the agency can reconsider an action on its own motion. 47 C.F.R. § 1.108.

³¹ Even though there may be situations where the notice and comment provisions of the Administrative Procedure Act may be less stringent when the Commission is considering reimposition of a discarded rule, *Sprint Corporation v. FCC*, 315 F.3d 369, 374-5 (D.C. Cir. 2003), in such circumstances the full analytical requirements of the APA must nevertheless be met in order to justify such reimposition. *American Mining Congress v. EPA*, 907 F.2d 1179, 1188-1189 (D.C. Cir. 1990).

cannot be treated as if it were simply a reconsideration petition. The Commission would need to affirmatively demonstrate the public interest need for such action. The test for such an evaluation is found in Section 251(d)(2) of the Act.

B. Any Discussion Of Pricing Is Premature.

Several of the other CLECs have filed comments that support the requirement that ILECs provide unbundled access to ILEC fiber and hybrid loop facilities, but they propose different pricing schemes.

As an initial matter, as Qwest, Verizon and AT&T have pointed out, it is very unclear what Cbeyond is actually proposing -- it discusses the need for unbundled fiber and hybrid loops, but then proposes an unbundled service that is actually a new bandwidth service that is between a DS1 and a DS3. As Qwest and some other parties described in initial comments,³² it appears that Cbeyond would like such a new service simply to enhance the execution of its business plan. As Qwest demonstrated in its initial comments,³³ Cbeyond can meet its needs for bandwidth between 1.5 and 45 Mbps by purchasing multiple DS1s or a DS3, and is not impaired without access to fiber and hybrid loops or the “new” 6-10 mbps offering. Neither Cbeyond nor the other CLECs have demonstrated that CLECs are impaired without access to these facilities. Since this subject is addressed in detail in Qwest’s initial comments, we will not repeat that discussion here.

As Qwest demonstrated in its initial comments, there is no basis for the unbundling of fiber and hybrid loops or the requirement that ILECs provide a new 6-10 mbps service at *any* price. Nonetheless, various CLECs have proposed different pricing requirements for the “new” elements. While Cbeyond proposes that the Commission set a price for these “new” elements at

³² Qwest Comments at 25-26; AT&T at 2; Verizon at 24-25.

³³ Qwest Comments at 25-26.

the “lowest retail rate,” XO and Covad propose different pricing schemes –XO proposes that prices be set at TELRIC,³⁴ and Covad proposes that prices be set based on an “actual cost, rate-of-return methodology.”³⁵

There is absolutely no basis for XO’s proposal to set TELRIC-based rates for fiber and hybrid loops when the Commission has determined that CLECs are not impaired without access to these elements. XO attempts to support its proposal by referring back to the Commission’s *Local Competition Order*, and the *Order*’s explanation of why prices for UNEs should be set based on TELRIC. It claims that TELRIC “remains the law of the land.”³⁶ However, Section 251 UNEs were priced at TELRIC because CLECs were determined to be *impaired* without access to these elements. The Commission has already determined that CLECs are *not* impaired without access to fiber and hybrid loops and no party has demonstrated that CLECs are impaired without a new unbundled 6-10 mbps loop offering. Covad proposes that “wholesale open access for hybrid and fiber loops could be priced using an actual cost, rate-of-return methodology”³⁷ but it never provides an explanation as to exactly what that means. Certainly there is no basis for setting prices for any service based on such an undefined construct.

In sum, there is no basis to require ILECs to provide fiber and hybrid loops to CLECs at *any* price, since CLECs are not impaired without access to these elements. Further, as described in Qwest’s initial comments, forcing ILECs to offer its broadband network on an unbundled basis to competitors would discourage investment and innovation, as the Commission found in the *Triennial Review Order*.

³⁴ XO at 9-11.

³⁵ Covad at 17.

³⁶ XO at 11.

³⁷ Covad at 5.

IV. THE CLECS' EXPANDING WISH LIST DEMONSTRATES THAT MANDATORY UNBUNDLING IS NOT THE SOLUTION TO THE CLECS' PURPORTED PROBLEM

What began as a request by Cbeyond for access to 1.5 Mbps to 6 Mbps of ILEC fiber loops at ILEC retail prices has, via the comments of various CLECs, expanded to a request for access to a channel ranging from 1.5 Mbps to 45 Mbps.³⁸ And the CLEC commenters also want the Commission to require ILECs to maintain their copper networks.³⁹ The reality is that CLECs have different “needs” and if the Commission opens the door on fiber unbundling as requested by Cbeyond, these purported “needs” will quickly snowball. As the CLECs’ proposals expand, this places a greater anticipated burden on ILEC networks which apparently would have to be the canvasses on which the CLECs not only differentiate their products but also provision their products. The enveloping reach of the CLECs’ proposals counsels even more for a continued deregulatory approach based on providing incentives for self-provisioning or third-party leasing as opposed to mandatory unbundling. An approach that does not rely exclusively on the ILEC network will allow carriers more flexibility to tailor their offerings to their customers.

A. The CLECs Are Essentially Asking The Commission To Require ILECs To Maintain And Support Fiber And Copper Networks.

In fact, there appears to be some question regarding the underlying premise of the Cbeyond Petition, *i.e.*, that unbundled fiber and hybrid loops are needed for CLECs to deploy more sophisticated business applications to the small business market. Some CLECs indicate, like Cbeyond, that they cannot serve small businesses without access to ILEC high-capacity packetized loops as TDM-based UNEs, and that special access services are allegedly not suitable

³⁸ Covad at 2.

³⁹ *Id.* at 5.

for providing many of the high-capacity services they provide or seek to provide.⁴⁰ They then explicitly state that incumbent copper loops are inherently limited in the services they can provide.⁴¹ But XO posits that given its nationwide reach, copper facilities can be used for faster and more cost-effective deployment of broadband than other technologies, including the fiber facilities *that currently extend to less than twenty percent of the nation's business locations*. XO notes in an *ex parte* filed February 12, 2010 that “advances in copper technology have enabled the deployment of “Ethernet Over Copper” (“EoC”) technology, which supports data speeds up to 45 Mbps today and possibly greater than 100 Mbps in the future.” XO concludes “Certainly, the cost-effective deployment of EoC promises important benefits...by attracting small, medium, and large businesses that require high-speed transmission services.”⁴²

Not only is this an indication of the CLEC industry not being on the same page, but it reflects a sort of entitlement mentality in regard to access to the ILECs' network. The CLECs do not view the fact that one CLEC's business plan prefers fiber loops and another prefers copper loops as a problem. They simply expand their proposal such that it supports mandatory unbundling of fiber loops and the maintenance of copper networks. Thus, under this expanded CLECs' proposal, the ILEC must incur the costs of supporting two networks to further CLEC business plans.

B. Qwest's Limited Copper Retirement Is Not Impinging On CLECs' Access To Copper.

Up to this point, Qwest has not retired any copper plant in response to its FTTH or FTTC deployment. In fact, Qwest's recent copper retirements have been related to government-

⁴⁰ Integra at 4-5.

⁴¹ *Id.* at 6.

⁴² XO Communications, LLC *ex parte*, filed Feb. 12, 2010 at 2; *see also*, Covad at 4.

mandated relocation of facilities. During such relocation, Qwest may take the opportunity to replace copper with fiber as warranted. While not required to do so, since the retirement does not pertain to greenfield fiber deployment, Qwest notices the copper retirement via network disclosures. In fact, pursuant to one such notification, Integra objected to the copper retirement but withdrew its objection because it was able to transition all of its customers to different types of unbundled loops that the fiber-fed digital loop carrier system could support.⁴³

Qwest, by no means, wants to suggest that it will not retire copper in the future pursuant to network management considerations and when it does it will make the appropriate disclosures. The point is, in the Qwest territory, CLECs have not experienced a lack of access to copper loops due to FTTH or FTTC deployment. As with other CLEC complaints in this proceeding, they are anticipating a problem before it even exists.

C. The Berkman Study Does Not Further The Case For Mandatory Unbundling.

Like Cbeyond, Covad and PAETEC argue that the *Berkman Report* provides “powerful evidence” that broadband deployment has been more successful in countries that have stringent “open access” policies. Based on the conclusions of this report, they argue that the United States can only “catch up” to these countries if the Commission requires the unbundling of fiber and hybrid loops as proposed by Cbeyond. However, the *Berkman Report* has been totally discredited by a host of economists and other expert analysts, as pointed out in the comments of AT&T, Verizon and Corning in this proceeding, and as demonstrated in the comments filed by numerous parties in the Commission’s Broadband and other proceedings (GN Docket No. 09-47,

⁴³ See letter from Russell C. Merbeth, Integra Telecom, Inc. to Marlene H. Dortch, FCC, Re Report No. NCD-1791, rel. Oct. 9, 2009, Wireline Competition Bureau Short Term Network Change Notification Filed by Qwest, Copper Retirements in AZ, IA, MN, NM, ND, SD, UT & WY; withdrawn by Integra in January, 2010.

et al.).⁴⁴ These parties have demonstrated that the Berkman Study is severely flawed and distorts evidence regarding what factors are driving broadband investment in other countries. As summarized in AT&T's comments in the Broadband proceeding:

..... the Report delivered by the Berkman Center is neither comprehensive nor competent. It ignores or summarily dismisses a wealth of literature and analysis that directly contradicts its conclusions; it relies on data sets regarding broadband performance that are unreliable on their face and even more so when subjected to expert review; it makes bald misstatements regarding the United States' experience with "open access" regulation; and it attempts to disguise its subjective bias by employing an econometric model that experts in the field have condemned as unprofessional and lacking in objectivity. In light of these many failings, the Commission cannot rationally rely upon the Report's analysis or conclusions in formulating the National Broadband Plan.⁴⁵

Since the significant flaws in the *Berkman Report's* methodology and conclusions have been discussed at length in these comments before the Commission, Qwest will not repeat all of those arguments here, but will offer a brief sampling of some of the *Berkman Study's* erroneous conclusions. In a recent paper filed February 2010 in the Canadian Broadband proceeding,⁴⁶ Dr. Robert Crandall provides an updated view of the studies and literature regarding broadband around the world. This paper summarizes the deficiencies in the *Berkman Report's* conclusions regarding broadband deployment and unbundling in Europe:

The international comparisons provided by the Berkman Center Report are simply not convincing. For instance, the Report refers approvingly to the alleged effects of unbundling in several Nordic countries and in the Netherlands without pointing out that platform-based competition from cable television and government-

⁴⁴ See comments and declarations filed on Nov. 16, 2009, in GN Dockets Nos. 09-47, 09-51 and 09-137 by AT&T, Verizon, Empiris LLC (Robert W. Crandall, Everett M. Ehrlich and Jeffrey A. Eisenach), Telecommunications Industry Association, United States Telecom Association and other parties.

⁴⁵ See Comments Of AT&T Inc. On Berkman Center Report National Broadband Plan Public Notice #13, filed Nov. 16, 2009 at 1 (footnotes omitted).

⁴⁶ Before the Canadian Radio-television and Telecommunications Commission (CRTC) Notice of Consultation 2009-261 -- Proceeding to consider the appropriateness of mandating certain wholesale high-speed access services.

provided fiber networks (in Sweden) generally provide many more broadband connections than unbundled copper loops. It cites France, which relies heavily on network unbundling, as a “success” and Germany which relies much more heavily on platform competition from cable as a “failure” despite the fact that the two countries have similar broadband penetration and essentially no fiber to the premises. And the Berkman Center Report reflects approvingly upon the United Kingdom’s “success” with network unbundling and functional separation without pointing out that since the UK adopted its new, more aggressive policy, broadband growth has slowed substantially. Before the change in policy, UK broadband subscriptions were growing more rapidly than connections in the rest of the EU-15; since the new policy, they have grown more slowly.⁴⁷

Cbeyond and PAETEC place a particular reliance on the *Berkman Report*’s discussion of Japan. PAETEC states: “In Japan, for example, NTT is required to provide unbundled access to fiber loops. Yet NTT continues to invest in deploying more fiber and other companies are deploying their own fiber facilities.”⁴⁸ While the *Berkman Report* provides flawed analysis of many countries, the CLEC’s particular emphasis on Japan compels a brief description of the study’s methodology and conclusions regarding this country. As Verizon notes: “Japan is *behind* the United States in terms of broadband penetration, despite the favorable demographics of that country -- *i.e.*, a dense, wealthy population that mostly lives in multi-dwelling units.”⁴⁹ AT&T reveals that in Japan, “fiber deployment has been heavily subsidized by the government and therefore is a particularly poor case study.”⁵⁰ AT&T also points out that “Nippon Telegraph and Telephone Corporation (NTT) - Japan’s largest telecom firm, which is one-third owned by the Japanese government -- has criticized the Berkman paper as being ‘seriously in error regarding numerous aspects of the history and current status of the Japanese broadband marketplace.’” In

⁴⁷ Comments of Robert Crandall on behalf of TELUS, Feb. 8, 2010 at 9-10 (Before the Canadian Radio-television and Telecommunications Commission (CRTC) Notice of Consultation 2009-261 - Proceeding to consider the appropriateness of mandating certain wholesale high-speed access services). See: http://www.crtc.gc.ca/PartVII/eng/2009/8663/c12_200907321.htm.

⁴⁸ PAETEC at 13 (footnotes omitted).

⁴⁹ Verizon at 22 (footnotes omitted).

⁵⁰ AT&T at 23-24.

particular, NTT states that ‘facilities based competition, not unbundling, has been the key spur to broadband growth in Japan.’” The aforementioned paper by Dr. Crandall further describes the situation in Japan:

.... But while it is correct to say that MIC [the Japanese regulatory body] has nominally required its incumbent carrier, NTT, to unbundle its fiber facilities, there has been little such unbundling in Japan because the regulator apparently has set the wholesale price of fiber very high and does not or cannot require unbundling of NTT’s individual fiber connections. As a result, NTT apparently has not been forced to unbundle its new fiber to the premises despite the professed public position of its regulator. This has allowed NTT to invest heavily in fiber to the premises with little fear that it will have to lease the fiber to its competitors.

These are just a few examples of the misdiagnosis of the relationship between unbundling and broadband deployment in other countries that is provided in the *Berkman Report* -- errors that have been detailed by multiple commenters in this and other proceedings. It is clear that the Commission should place no weight on the flawed *Berkman Report*, or beyond, Covad and PAETEC’s regurgitation of its findings. This study, along with the ETI study (which is addressed in Qwest’s initial comments) and the QSI study (described elsewhere in these comments) are each fatally flawed, and provide no meaningful guidance for the Commission.

V. THE QSI STUDY PROVIDES A FLAWED AND DISTORTED VIEW OF THE BENEFITS OF MANDATORY UNBUNDLING

A. Self-Provisioning Is A Viable Option For CLECs.

In this proceeding and the Broadband proceeding, Covad filed a study prepared by QSI Consulting.⁵¹ In its study, QSI concludes that CLECs are generally unable to viably construct and operate their own facilities except under very favorable conditions, such as when a large number of customers are located at extremely short distances from an existing metropolitan fiber

⁵¹ Comments of Covad in response to NBP Public Notice #13, GN Docket Nos. 09-47, 09-51 and 09-137, filed Nov. 16, 2009.

ring. However, as described below, the QSI study is fatally flawed, and does not provide meaningful or reliable information.

There are two overarching problems with QSI's conclusion. First, essentially QSI is contending that only in the rarest of cases will a CLEC *ever* be able to self-provision facilities. To put this in perspective, it is now over 14 years since the enactment of the Telecommunications Act of 1996, and many CLECs are apparently no closer to self-provisioning in many areas than they were over a decade ago.⁵² As Qwest noted in its initial comments, the intent of the Act was to establish UNEs as a transitional mechanism to jump-start competition, but to wean CLECs off of ILEC networks so as to spur facilities-based competition.⁵³ Only with facilities-based competition will there be product differentiation and substantive price competition. Today, there is facilities-based competition from cable and wireless providers and *some* CLECs, and this is spurring product differentiation and price competition. But the CLECs who continue to depend on the ILEC network are not contributing to this facilities-based competition, and according to QSI they will not do so in the foreseeable future.

Second, QSI seems to believe ILECs must continue to build facilities, at their own risk, to meet the needs of CLECs. However, Qwest cannot simply pursue an "if we build it, they will come" strategy. Qwest is in no position to risk placing investment that does not generate sufficient revenue to recoup its costs. Thus, Qwest has to prudently target its capital investment to areas in which it can maximize its ability to meet identified demand. But even with such

⁵² While many CLECs deploy fiber in only limited locations, tw telecom has deployed fiber to many locations, and has shown that this can be a lucrative business plan. tw telecom, whose revenues continue to increase, states: "Our focus on using our fiber facilities-based services, rather than reselling network capacity of other providers, requires that we make significant capital investments to reach new and existing customer locations." (See tw telecom 2009 Form 10K, released in February 2010.)

⁵³ Qwest Comments at 3-4.

targeting, there are no guarantees of success; Qwest has to take risks like any other carrier that invests in facilities. At the same time it has the costs of maintaining its existing network. The CLECs, at least those who do not self-provision, do not have to take these risks because the ILEC is bearing them. In essence, the CLECs are pursuing a “if the ILEC builds it, we will come” strategy. As described elsewhere, in the *TRO* the Commission determined that unbundling of fiber and hybrid loops should not be required, with the understanding that this would incent fiber investment by ILECs –a predictive judgment that has proven correct. Now that fiber loop plant has been added to the ILEC networks, CLECs want access to it on an unbundled basis. However, this will only discourage future investment in broadband networks.

B. QSI’s Inaccurate Determination Of The Costs Of Wholesale Inputs Discredits Its Price Squeeze Argument.

The QSI study concludes that CLECs who are dependent on ILEC “last mile” distribution facilities are effectively foreclosed from widespread provision of competitive broadband services under the FCC’s existing “unbundling rules because the gap between the retail price and lease cost is allegedly too narrow.” One of the conclusions that QSI reaches is that the lack of unbundled access at cost-based prices impedes competition in the broadband market. QSI bases this finding on an analysis of various leased loop deployment scenarios including what it labels: (1) all-copper loops; (2) hybrid fiber/copper loops; (3) all fiber loops. These scenarios should not be confused with the fiber and hybrid loop unbundled elements requested by Cbeyond in this proceeding as the QSI “hybrid fiber/copper loops” and “all fiber loops” scenarios present lease scenarios including a combination of special access services and unbundled network elements that are available today. QSI examines the cost of these scenarios for ten different Metropolitan Statistical Areas (MSAs). Based on this analysis, QSI concludes that limitations on CLECs’

ability to compete more broadly are the result of “escalating costs as configurations over fiber facilities have to be purchased at higher, non-UNE based prices.”⁵⁴

In support of this conclusion, QSI presents a table on page 16 of its report which lays out the “lowest” and “highest” rates for the various deployment scenarios [the three lease scenarios] in several MSAs throughout the U.S.⁵⁵ The two Qwest MSAs included in the table are Phoenix, Arizona and Seattle, Washington. For the deployment scenarios which involve all-copper loops and hybrid loops, QSI breaks down the rates shown on the table by *TRRO* impaired wire centers and non-impaired wire centers, using UNE and special access rates respectively. The transport rates used in the QSI analysis are calculated assuming 10 miles of transport and the special access rates are calculated assuming a 36-month term plan. QSI does not specify how many 2-wire UNE loops were used in their calculation for the bonded pair.

The QSI study shows the “lowest” rate for a 2-wire UNE loop and DS3 UNE transport (the “all copper loop” scenario) in a Phoenix *TRRO*-impaired wire center to be \$63.81 and the “highest” rate to be \$118.59. Qwest calculated⁵⁶ the “lowest” Arizona rate at \$327.05 and the “highest” rate to be \$354.44. Qwest was unable to determine how QSI reached its component cost figures for the leased network services and unbundled network elements based on Qwest’s rates. Qwest’s Arizona Zone 1 (lowest rate) 2-wire unbundled loop rate is \$9.05. Qwest’s Arizona unbundled DS3 transport rate for a 10-mile band fixed component is \$159.00 and the rate per mile is \$15.90 (times 10 miles). The actual Qwest rates in Arizona are much different than that portrayed by QSI. Thus, Qwest was unable to match the rates shown by QSI in their

⁵⁴ Covad at 12-13, *citing*, QSI Report at 17-19.

⁵⁵ QSI Report at 16. “Lowest” and “highest” denotes lowest and highest rate zones.

⁵⁶ Qwest uses its current rates from the Arizona and Washington UNE price lists, as well as its FCC tariffs for special access in its analysis.

table using the components that QSI described in the table. Qwest had the same problem when trying to recreate *any* of the rates shown on this table for all the scenarios shown in both Arizona and Washington.

QSI also attempted to demonstrate that the costs for leasing facilities in non-impaired wire centers are much greater than in impaired wire centers. While it is true that the costs of leasing facilities is greater in non-impaired wire centers, the FCC has determined that CLECs have competitive options to UNEs in those wire centers. Even so, the QSI study is misleading regarding the extent to which Qwest has been granted non-impairment under the *TRRO* in both Arizona and Washington. 2-wire and DS1 unbundled loops are available in all 48 wire centers within the Phoenix MSA. In Seattle, 2-wire unbundled loops are available in all 27 wire centers within the MSA and DS1 unbundled loops are available in all wire centers except Seattle Main. The QSI study demonstrates that even in *TRRO* non-impaired wire centers, CLECs are using 2-wire unbundled loops configured into bonded pairs and that they are multiplexing them onto higher bandwidth facilities for the provision of broadband. Today, CLECs can purchase DS0 unbundled loops from their interconnection agreements in all Phoenix and Seattle wire centers. By configuring their networks in this manner, they are able to obtain the functionality of a DS1 unbundled loop at a fraction of the cost which demonstrates the fallacy of any lease cost-based price squeeze arguments.

The analysis on page 18 of QSI's study attempts to demonstrate that current available combinations of special access facilities and unbundled network elements are priced many times higher than a QSI-defined mixture of "new" unbundled elements (for which there is no retail analog). QSI calculates a ratio of the "Currently Available" leased element prices to the alleged "Cost-based prices" for new elements. This analysis is fatally flawed. First, as described above,

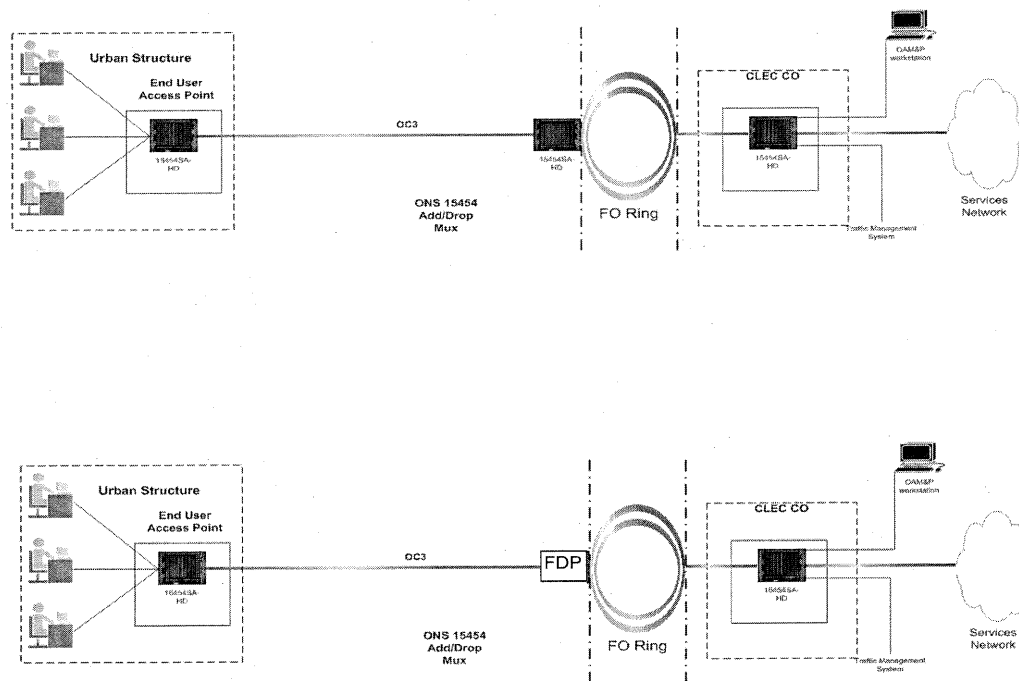
for the “Currently Available” leased elements column, QSI does not use the correct tariffed or Interconnection agreement rates. Second, the “Cost-based but Not Available” column identifies costs for a service configuration (Fractional DS3) that does not exist as a resale or wholesale product. The QSI analysis separates out a 5 Mbps bit stream (which is the equivalent of a little more than 3 DS1’s) from a full DS3 45 Mbps service (28 DS1’s). Even assuming that the cost of a fractionalized 5Mbps bit stream is $5/45^{\text{th}}$ the cost of a DS3 loop, the “Cost-based but Not Available” column is slightly higher than the “Currently Available” leased rates when the OC3 transport (no longer available as a UNE) is included at the last UNE price point. Thus, if QSI were to use the correct special access and/or UNE rates for this comparison, the analysis would show that special access is actually comparable in price to the DS3 UNE loop plus OC-3 UNE transport price used in their scenario; not three to five times higher as portrayed in their table. Therefore, QSI’s conclusions that a price squeeze precludes CLECs from broadband markets are based on false information, and represent a very shoddy analysis.

C. QSI’s Flawed Network Modeling Understates The Real Cost Of CLEC Self-Provisioning.

The QSI study examines the “economic feasibility” of extending a CLEC network in terms of the relationship between the incremental costs of serving additional customers and the associated incremental revenues, which are defined as the anticipated revenues of the newly-connected customers at the prevailing market prices for the services the customers buy. While the framework that QSI provides is an accepted method for determining the economic viability of projects, QSI provides very limited data for examination to determine the validity of its study. After examining the limited data provided by QSI, one can determine that the study is flawed and the results are not indicative of an analysis of real world incremental costs of extending a CLEC network.

The flaws in the study can be grouped into four areas: 1) network architecture; 2) equipment and construction costs; 3) the flawed development of cost from investment through the use of annual charge factors and shared and common cost factors; and 4) the comparison of cost per unit and revenue per unit. These critical flaws result in an estimate of self provisioning costs that is highly overstated.

First, the architecture presented by QSI for serving a single building location, with one or more customers at the location purchasing service is flawed. In this configuration, identified in the top half of the diagram below, QSI models an Add/Drop MUX ring node (Cisco ONS 15454SA-HD) and a Terminal Node (Cisco 15454SA-HD) at the customer premise. However, if only a single building is being served on a single fiber lateral, the Add/Drop Mux ring node can be eliminated and replaced with a fiber distribution panel (fiber cross connect panel) where two ring fibers are connected to the fiber lateral. This is reflected in the bottom half of the diagram below. Changing the architecture to reflect the removal of the ring node equipment greatly reduces the investment that would need to be recovered from customers at a single building.



The second major flaw in the QSI study relates to the construction cost of the fiber laterals and the cost of the Cisco equipment. QSI uses a Gates Foundation study for its \$26 per foot cost for placing a fiber lateral. However, other means of placing fiber are available to CLECs that do not involve construction activities. For example, Qwest offers, when available, innerduct and microduct to CLECs in its 14-state ILEC region, at prices between \$0.13 and \$0.50 per foot per year. While the innerduct and microduct may not be available in all situations, when it is available it can certainly be used to reduce the cost of placing fiber laterals to a small fraction of the \$26 per foot that QSI uses exclusively in their study. In addition, QSI does not provide any equipment price data for the Cisco equipment utilized in their study. Multiple vendors provide carrier-grade equipment with the same functionality as the Cisco equipment. However, QSI does not indicate that they have examined the equipment market in order to

demonstrate that the Cisco prices used by their model indeed reflect the least-cost currently available technology.

The third major flaw of the QSI study relates to the application of annual charge factors and shared and common cost factors. The QSI study applies annual charge factors (ACFs) of 30 percent for fiber investments and 40 percent for electronic equipment to account for capital carrying costs, maintenance, and allocation of plant nonspecific expenses such as Network Engineering and Network Operations. As part of the justification for these ACFs, QSI points to data from a 2006 Qwest UNE cost case in Minnesota, where QSI represents that Qwest's ACF for electronics was over 47 percent. Unfortunately, QSI's calculation is mathematically flawed because it adds the individual factors together and ignores the fact that some of the factors are applied to investment accounts, while other factors are applied to costs. Because the bases are different, the factors cannot be added to provide an accurate ACF. The actual ACFs that QSI is attempting to calculate from the Minnesota cost study are 24.8 percent for electronic equipment and 16.9 percent for fiber investments. The result of this mathematical mistake is to greatly overstate the estimated direct monthly costs incurred by a CLEC for extending its network. The ACFs used by QSI result in monthly cost for fiber that are over 1.7 times higher and electronic costs that are 1.6 times higher than they would be if they had used the correct ACFs from the Minnesota Qwest study.

QSI also applied a factor of 35 percent to add CLEC shared and common costs to the incremental direct costs of adding customers to the CLEC network. In this case, QSI did not look to Qwest's studies in the 2006 Minnesota UNE cost case for justification of the factor. In the Qwest studies in the 2006 Minnesota UNE case, the factor for adding shared and common cost was 10.4 percent -- less than one-third of the factor applied by QSI. Thus, QSI assumes that

CLECs have a disproportionately large amount of shared and common costs for their operations. There is no basis for applying such a high common cost factor, unless QSI believes that the CLEC operations are exceptionally inefficient, with bloated overheads. Again the result of QSI's use of a 35 percent factor is to grossly overstate shared and common cost for a reasonably efficient CLEC's operations.

The fourth major flaw in the QSI study relates to its comparison of cost and revenue. QSI inappropriately reduces the expected revenue by 17 percent to account for a CLEC's retail marketing cost. This reduced revenue is then compared to a fully allocated cost that is (over-inflated for the reasons stated above). QSI's comparison assumes that every customer must cover an equal share of marketing, shared, and common costs. This is not how competitive economic markets work, as some customers of any product in any market provide a higher proportion of contribution than other customers; the level of contribution cannot be assumed to be uniform.

A more appropriate comparison of the incremental cost and incremental revenue is to compare the direct costs of extending the network exclusive of marketing, shared, and common costs, with the total revenues gained from the extension of service. This demonstrates whether the extension to a customer(s) provides a positive contribution to the recovery of marketing, shared, and common costs. That is, when a CLEC is deciding whether to build to a site, it would need to compare the potential future incremental revenues it could obtain with the incremental cost of building the extension -- absent any allocation of shared, common and marketing costs. This method -- not the QSI method -- should be used to determine whether the network extension is economically viable.

Given that fiber facilities currently extend to less than twenty percent of the nation's business locations,⁵⁷ it is apparent that not only CLECs, but ILECs as well, must make economic evaluations of whether to extend facilities to business locations without fiber connectivity. The costs faced by both ILECs and CLECs in extending fiber facilities are indistinguishable. Both ILEC and CLEC face high costs of placing underground or buried plant in urban environments; both ILEC and CLEC face high costs of placing electronics to small groupings of customers; and both ILEC and CLEC would need to undertake the risks associated with recovering fixed investments over the long term, at a time when customers have choice and the ability to switch to other facility-based providers of small business services. Risks are associated with the deployment of fiber investments and the CLECs should not be shielded from these risks by forcing the unbundling of fiber facilities by the ILEC. In the *TRO*, the Commission recognized the risks inherent in building next generation facilities, and determined that ILEC fiber and hybrid loops need not be unbundled, so that ILECs would have the incentive to engage in building new fiber facilities. As demonstrated elsewhere in Qwest's initial and reply comments, the Commission's predictive judgment has been borne out, as ILECs have invested heavily in fiber facilities. Requiring the unbundling of fiber and hybrid loops would stifle future investment in these facilities -- by both the ILECs and CLECs. Ultimately, forcing the unbundling of ILEC fiber facilities will lead to fewer network choices for small business customers, not more choices.

VI. CONCLUSION

For the foregoing reasons, the Commission should summarily dismiss the Cbeyond Petition.

⁵⁷ XO Feb. 12 *ex parte* at 2.

Respectfully submitted,

QWEST COMMUNICATIONS
INTERNATIONAL INC.

By: /s/ Harisha J. Bastiampillai
Craig J. Brown
Harisha J. Bastiampillai
Suite 950
607 14th Street, N.W.
Washington, DC 20005
(303) 383-6671
Craig.Brown@qwest.com
Harisha.Bastiampillai@qwest.com

Its Attorneys

February 22, 2010

EXHIBIT A

Fairfax Radiological Consultants, P.C. (FRC)

Fairfax, Virginia

Services:

Cox Transparent LAN

SITUATION:

When dealing with X-rays, MRI and CT scans and other radiological services, speed is critical. Nobody knows this better than Fairfax Radiological Consultants (FRC), the largest full-service radiology physician practice in the Washington, D.C. metropolitan area as well as the Commonwealth of Virginia. Its board-certified radiologists specialize in mammography, ultrasound, interventional radiology, CT and MRI scanning, nuclear medicine, diagnostic X-ray, pediatric imaging and other radiological services. In addition, the company employs over 500 professionals, registered technologists and support personnel.

FRC works with three major area hospitals, and owns and operates 14 outpatient facilities in the Northern Virginia area. The company had been using a courier service to pick up and drop off images and X-rays to its outpatient facilities, but that method was becoming inefficient and outdated.

"We were about to implement Picture Archiving Communications (PAC), a brand-new technology system that would enable us to move data versus physicians or film from one center to another. This would allow patients to go to the facility closest to their homes, and would also greatly reduce turnaround time for study results," said Rick R. Arnold, FRC's Senior Director of Information Technology. "But we needed greater network bandwidth to move large digital image files more quickly." Unfortunately, FRC's current network service provider was not up to the challenge.

SOLUTION:

FRC had been researching network options for several years with no success. Fortunately for us, many of FRC's radiologists and employees were already using Cox for their residential communications services, and were impressed with our capabilities and customer support. So when Cox Business Services approached FRC to discuss its needs, Arnold was interested.

After discussing PAC and further understanding FRC's data communications needs, we recommended installing Cox Transparent LAN powered by CISCO for added bandwidth and

speed. The Cisco Powered Network designation provides the assurance that the Cox Transparent LAN service meets the most stringent standards for network reliability and performance. Arnold agreed. "We chose Cox because they were cost-effective and reliable," he said. "Their optical transparent LAN service was exactly what we needed."

But what really clinched the deal was Arnold and his team's visit to our Springfield Systems Operations and Data Center, where they saw our network operating with the necessary mechanisms in place to carefully and proactively monitor the network, something Arnold's current provider did not have.

RESULTS:

FRC networked 10 of its 14 Fairfax County offices together using Cox Transparent LAN service, and Arnold is more than pleased with the results. The radiologists have improved their service delivery and turnaround times and are more readily available for consultations and image review. Urgent medical issues are now identified and diagnosed more quickly, as a result of implementing PACS and switching to Cox. Both changes have resulted in more effective patient treatment. Plus, the company has saved money by reducing its current film, courier and delivery charges.

"With Cox Business Services, the amount of data we get from our network in a short period of time is amazing," Arnold said. "This helped us build more efficiencies, which helped reduce costs while improving patients' medical services."

"Having a reliable service provider is essential to our business," he continued. "I would definitely recommend Cox Business Services to any business that faces a similar challenge of transmitting sensitive data quickly across multiple locations or facilities."




CERTIFICATE OF SERVICE

I, Richard Grozier, do hereby certify that I have caused the foregoing **REPLY**
COMMENTS OF QWEST COMMUNICATIONS INTERNATIONAL INC. to be: 1) filed
with the FCC via its Electronic Comment Filing System in WC Docket No. 09-223; 2) served on
the Competition Policy Division, Wireline Competition Bureau, Federal Communications
Commission at CPDcopies@fcc.gov; and 3) served via email on the FCC's duplicating
contractor, Best Copy and Printing, Inc. at fcc@bcpweb.com.

/s/ Richard Grozier

February 22, 2010



CERTIFICATE OF SERVICE

I, Richard Grozier, do hereby certify that I have caused the foregoing **COMMENTS OF QWEST COMMUNICATIONS INTERNATIONAL INC.** to be: 1) filed with the FCC via its Electronic Comment Filing System in WC Docket No. 10-188; 2) served via e-mail on Mr. Tim Stelzig and Ms. Heather Hendrickson of the Competition Policy Division, Wireline Competition Bureau at tim.stelzig@fcc.gov and heather.hendrickson@fcc.gov; and 3) served via e-mail on the FCC's duplicating contractor, Best Copy and Printing, Inc. at fcc@bcpiweb.com.

/s/Richard Grozier

October 15, 2010